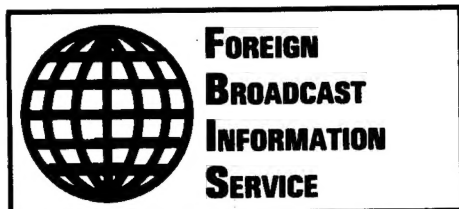


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24 March 1993



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Central Eurasia

Military Affairs

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Central Eurasia

Military Affairs

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24 March 1993

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CIS/RUSSIA ARMED FORCES

Contract Service Recruitment Advertisement

93UM0302A Moscow KRASNAYA ZVEZDA in Russian
19 Dec 92 p 4

[Unattributed article: "Military Service Under Contract—A Worthwhile Cause!"]

[Text] The romance of military service and the opportunity to prove yourself!

The accomplishment of the dream to become strong, courageous and adroit!

Rapid professional growth and social maturity!

Interesting and fascinating work!

High earnings!

Free provision of food and personal effects!

Free medical care!

All of that awaits you in the army and navy—if you conclude a contract

THE GOVERNMENT OF THE RF GUARANTEES:

- the retention of work at an enterprise or institution and average earnings in both principal and additional fields;
- the retention of place in line for the receipt of housing space;
- free passage for the serviceman, members of his family and the shipping of household effects to the place of service with payment of a moving stipend;
- high pay;
- payment of one-time monetary stipends in the amount of the salary when concluding the contract, in January of each year, as well as annually in the capacity of material assistance;
- supplemental pay for years of service, when extending the contract, for skills ratings and for special conditions of service, among others;
- provision of all types of gear;
- places for children in children's preschool institutions;
- paid leave of no less than thirty days, not counting time on the road, with free passage after six months of service; and
- free medical care.

TERMS OF ACCEPTANCE

Accepted for service under contract are:

- servicemen who have served for no less than six months on active conscript service;
- reservists in the reserves of the armed forces of the RF who are no older than 40 years of age;
- youth who have reached draft age;

—unmarried, childless women and the wives of servicemen who have no children of preschool age, who are 20 to 40 years of age.

The primary term for the conclusion of a contract is three years, and it may then be extended.

Draftees, reservists and women may inquire at the military commissariats to conclude a contract or for additional information. Servicemen should see the command of the military units or ships.

The Armed Forces of the Russian Federation await you!

Russian-German Talks on Troop Withdrawal

93WC0021A Moscow KOMMERSANT-DAILY in Russian
3 Feb 93 p 10

[Report by Anastasiya Romashkevich: "Accommodations for the Military Should Be Built More Quickly"]

[Text] Colonel General Matvey Burlakov, commander of the Western Group of Forces, announced in the Russian Embassy in Berlin yesterday the results of a meeting of the Russian-German Troop Withdrawal Commission which was held last week. According to the decision adopted, 90 percent of the Russian forces stationed on the territory of Germany will have been withdrawn before the end of 1993.

The commission session confirmed the final date of the troop withdrawal and adjusted its timetable: 90 percent will be withdrawn in 1993, the remaining 10 percent will have left by 31 August 1994. There are 370,000 Russian soldiers in the FRG at this time, that is, 40 percent of the contingent there earlier (in the cold war period the United States had 270,000 men in the FRG).

Some 211,000 Russian servicemen had been withdrawn from East Germany by the end of 1992. In December 1992, FRG Chancellor Helmut Kohl and Boris Yeltsin agreed to shorten the timeframe of the troop withdrawal by four months. In exchange Russia received an additional DM550 million for the construction of accommodations for the servicemen.

The original plan for the construction of accommodations for the servicemen withdrawn from Germany approved in March 1991 by USSR Defense Minister Dmitriy Yazov contemplated more than 50 percent of the apartments being located in Ukraine. But the latter requested for this construction DM4.1 million, to which Russia did not agree. In October 1991 the plan was reoriented toward Russia and, with negligible adjustments, is in effect at this time. In accordance with this plan, the construction of accommodations for the Russian military will be completed only by the end of 1994, which, in the opinion of the German side, complicates the troop withdrawal.

Your KOMMERSANT correspondent was informed in the Russian Foreign Ministry that there is no "precise linkage" between the troop withdrawal timescale and the presentation of the accommodations, but that it is in Russia's interests to accelerate the latter. The Foreign Ministry believes that the main contradiction between Russia and Germany on the question of the troop withdrawal was the

nonparticipation of firms of East Germany in the construction of the accommodations, but that "this problem has now been resolved."

Timetable of Withdrawal of Servicemen From Germany

Date	Servicemen Withdrawn	Servicemen Remaining
12-31-90	—	800,000
12-31-91	219,000	581,000
12-31-92	211,000	370,000
12-31-93	333,000	37,000
8-31-94	37,000	0

CIS: POLICY

Examination of Law on Servicemen's Status

93UM0302B Moscow KRASNAYA ZVEZDA in Russian
19 Dec 92 p 1

[Article by Vladimir Yermolin: "The Status of the Defender of the Fatherland is Defined by Law. The Main Thing is That the Law Work"]

[Text] The parliament, as has already been reported, on Thursday approved as the foundation, in the second reading, the draft law "The Status of Servicemen and Legal and Social Guarantees for Citizens Discharged From Military Service and the Members of Their Families." Now it only remained for the draft law to undergo the stage of stylistic editing before it is submitted for a final vote. The text that has been approved, as was reported to me at the Committee of the RF Supreme Soviet on the Affairs of Invalids, Veterans of War and Labor and the Social Protection of Servicemen and the Members of Their Families (the chief developer of the draft legislation), will now effectively not undergo any fundamental corrections, and the basic provisions of this long-awaited law for the military person can thus now be revealed without any particular risk of error.

As Viktor Bushuyev, one of the developers of the draft legislation, noted, "the day this law is passed could be considered the day of the Constitution of the Serviceman." There is a large dose of truth in that—the rights, obligations and responsibilities of servicemen have been established this clearly at the level of law for the first time, and the "fundamentals of state policy for the legal and social protection of servicemen, citizens discharged from military service and the members of their families" have been defined.

This document, signed by the President of Russia, will undoubtedly see the light of day in full on the pages of KRASNAYA ZVEZDA; today we will dwell only on some of the provisions of it.

The first section, the article "Servicemen and Their Status," states that "the legal status of servicemen in society is defined by the duties entrusted to them for the armed protection of the state connected with the necessity of the unquestioning fulfillment of assigned tasks under any conditions, including those with a risk to life." This

article also has the clarification, "Officers who are completing military service under conscription are equivalent in legal standing to officers who are serving under contract." That is an important clarification, since the law, oriented toward the future, relies principally on the concept of "service under contract." These provisions naturally pertain both to officers serving today and to those who are not serving on a contract basis. This element is expected to be taken into account in the decree on the procedure for putting the law into force.

The institution of the law will end the "non-passport" period in the life of the Russian serviceman, since the second paragraph states that "servicemen have the document stipulated for the citizens of the Russian Federation attesting to their person and citizenship, as well as a document attesting to the person and legal status of the servicemen."

The article defining the guarantees of legal and social protection has seemingly accomplished the "age-old" dream of the lower ranks for fairness, since from now on "any differences in the rights and conditions for the completion of military service or material support are established only by the legislation of the Russian Federation." Something substantial has been added here—"standard documents granting privileges cannot be of a closed (secret) nature."

There is also an article on the protection of the liberty, honor and dignity of servicemen. I would single out this element: insulting a military person, violence against him or infringing on his health, habitation, property or other actions violating his rights in connection with the performance of the duties of military service are aggravating circumstances. It is separately stipulated, by the way, that the religious and other convictions of servicemen cannot serve as grounds for restricting their rights, including in the resolution of personnel and social issues.

Freedom of speech and the right to take part in mass meetings in principle, as for all other citizens, naturally without the right to divulge state or military secrets, as well as to discuss or criticize orders. If a desire to assemble arises after a watch, duty shift or training exercise, go ahead—off the grounds of the unit and not on official time. The "man with the rifle," however, is not permitted to strike or picket. Moreover, "servicemen may create and be part of social associations that do not pursue political aims, and take part in any activity on non-official time."

The time for citizens to complete military service is counted toward their overall work service at the rate of one year for two. If a wife did not have the opportunity to work, the whole period of her residence with her husband at remote garrisons is counted toward overall service time.

The article "Pay and Allowances" has an interesting sentence: "The state provides the servicemen with pay in an amount that stimulates the vested interest of citizens in service." The figures are as follows: the salaries of soldiers, sailors, non-commissioned and petty officers completing service under contract should be not less than five times

the minimum size of labor salaries from the first post, while the salaries for military rank are no less than three times labor salaries. Next is a whole list of benefits promising additional income to the family budget of the serviceman.

A most acute issue has also been taken into account—that is, the right to housing has been stipulated. We would note, true, how many such laws and decrees there already are. We will hope, however, that this will turn out to be a real improvement in the housing conditions of the military and their families. We would note that if you went into the service under contract, your place in line moves ahead over those years, since they do not have the right to take you off the waiting list.

Those who are discharged into the reserves with service of ten calendar years or more are provided with apartments no later than in three months' time. If there is not an opportunity to give them a roof over that time, the bodies of self-government are obligated to provide compensation for the rental of housing. This section is one of the most voluminous in the law overall. It would seem that all instances in life have been envisaged to keep the serviceman from ending up shortchanged of housing.

There is unfortunately no opportunity to cover the substance of the draft law and all of its twenty-eight articles more or less completely. I repeat that one must arm oneself with patience—the law on the status of servicemen, as well as the other laws in the military package, will be published in KRASNAYA ZVEZDA. The main thing, as opposed to many good and very good laws, is that it get started and really be reflected in our Russian Army, experiencing its latest youth.

The deadline for the entry into force of the law "The Status of Servicemen..." is expected to be 1 Jan 93. The last word belongs to the Supreme Soviet and the President.

Draft Law on Servicemen's Legal Recourse

93UM0302C Moscow KRASNAYA ZVEZDA in Russian
22 Dec 92 p 1

[Article by Vladimir Yermolin: "The Draft Law Envisages the Right of the Serviceman to Appeal to Court"]

[Text] On Monday, meeting separately by chambers, the Supreme Soviet considered the first reading of yet another draft law from the "military package"—"The Legal Recourse of Servicemen to Military Court for Unlawful Actions by the Bodies of Military Administration and Military Officials." It was submitted for the consideration of President of the RF Boris Yeltsin and the parliamentary Committee on the Affairs of Invalids, Veterans of War and Labor and the Social Protection of Servicemen and the Members of Their Families.

The draft law is yet another link in the unified legislative system being created to protect the rights of individuals in the armed forces. It should be taken into account that although Article 63 of the Constitution of the Russian Federation guarantees every citizen the protection of his

rights and liberties, that guarantee has not yet been legislatively provided in relation to servicemen. The current draft law actually endows the serviceman with the right to appeal to a military court for the first time. The military person will thus be included in the sphere of legal activity with the adoption of this law, the more so as the consideration of a complaint is envisaged to be made by the military court according to the rules of a civil trial.

Small in size, with just nine articles and four pages of typewritten text, the draft law will undoubtedly bring mutual relations in the army to a new level. But only the first stage has been completed as yet—the second reading lies ahead. The secretary of the Committee on the Affairs of Invalids, Veterans of War and Labor and the Social Protection of Servicemen and the Members of Their Families, Yevgeniy Alayev, assumes that the draft will be able to become law within one or two months if the conditions are favorable (if no one suddenly announces an alternative treatment).

The draft law "The State Border of the Russian Federation," as well as "The Status of Heroes of the Soviet Union and the Russian Federation and Full Holders of the Order of Glory," was also submitted for the discussion of the chambers the same day.

Russian Federation Law on Status of Servicemen

Text of Law

93UM0383A Moscow KRASNAYA ZVEZDA in Russian
4 Feb 93 pp 1-4

[Law of the Russian Federation "On the Status of Military Servicemen"]

[Text] This law establishes the rights, responsibilities and liability of servicemen and determines the principles of state policy regarding legal and social protection of servicemen, of citizens discharged from military service and their families.

Section I. General Provisions

Article 1. Military Servicemen and Their Status

1. The status of servicemen is defined by the sum total of the rights, freedoms, responsibilities and liabilities of servicemen established by legislation and guaranteed by the state.

The particular features of the legal status of servicemen in society are determined by the responsibilities imposed on them concerned with armed defense of the state and associated with the need for unquestioning fulfillment of missions under any conditions, including at risk to their lives.

Servicemen serve active duty in military units, aboard ships, in enterprises, institutions, organizations and military professional educational institutions (hereinafter referred to as military units) in accordance with the Russian Federation law "On the Military Obligation and

Military Service." Such servicemen include officers, sea-going and shore-based warrant officers, cadets of professional military educational institutions, NCOs, petty officers, privates and seamen who had entered military service on the basis of a contract (hereinafter referred to as contracting active duty servicemen); NCOs, petty officers, privates and seamen serving active duty on the basis of induction orders, as well as cadets of professional military educational institutions prior to signing a contract (hereinafter referred to as inducted active duty servicemen).

Inducted active duty officers are equal in their legal position to contracting active duty officers.

2. Servicemen are issued documents established for citizens of the Russian Federation attesting to their identity and citizenship, and documents attesting to their identity and legal position as servicemen.

3. Servicemen have the right to store, wear, employ and use weapons in accordance with policy determined by legislation of the Russian Federation and by general military regulations of the Armed Forces of the Russian Federation.

4. Limitations on some general civilian rights and freedoms based on particular features of military service are established by this Law and by other legislative acts of the Russian Federation, and are compensated by advantages for servicemen.

5. The particular features of the status of servicemen in wartime and in states of emergency are established by laws of the Russian Federation on martial law, on mobilization and on a state of emergency.

6. State government and administrative bodies of the republics within the Russian Federation and of autonomous oblast, autonomous okrugs, krays, oblasts and the cities of Moscow and St. Petersburg (hereinafter referred to as state government and administrative bodies), bodies of local self-management, enterprises, institutions and organizations may establish additional advantages for servicemen, for citizens discharged from active duty and for their families.

Article 2. Citizens Possessing the Status of Servicemen

1. A citizen of the Russian Federation acquires the status of servicemen with the beginning of active duty and lose it upon termination of active duty. The time of active duty is established by the Russian Federation law "On the Military Obligation and Military Service."

The status of servicemen is extended to citizens of the Russian Federation ordered to attend military training in cases and in accordance with policy foreseen by this Law and legislation of the Russian Federation.

2. The status of servicemen on active duty in other states is determined in accordance with international treaties and agreements of the Russian Federation.

3. Servicemen who are taken prisoner and who are interned in neutral countries retain the status of servicemen. State government and administrative bodies of

the Russian Federation and the military command are obligated to take steps to gain the release servicemen in accordance with the rules of international law.

4. Advantages foreseen by legislation of the Russian Federation extend to the families of servicemen, to citizens discharged from active duty and to their families.

Article 3. Guarantees of Legal and Social Protection of Servicemen, Citizens Discharged From Active Duty and Their Families

1. The rights of servicemen are established with regard for the military positions they occupy and their ranks, as well as for the conditions under which they serve active duty and their material support, by this Law and other legislative acts of the Russian Federation, by edicts of the President of the Russian Federation and by decrees of the government of the Russian Federation.

2. Providing legal and social protection to servicemen, citizens discharged from active duty and their families is a responsibility of state government and administrative bodies, bodies of local self-management, courts and law enforcement organs, and it is also the responsibility of commanders (superiors). Public associations may also assist servicemen, citizens discharged from active duty and their families in the exercise of their rights in accordance with the law.

3. No one has the right to limit exercise of rights guaranteed by the Constitution of the Russian Federation and this Law by servicemen, citizens discharged from active duty and their families. Officials of state government and administrative bodies, of bodies of local self-management and of enterprises, institutions and organizations, and commanders (superiors) guilty of failing to fulfill their responsibilities regarding the exercise of the rights of servicemen, citizens discharged from active duty and their families bear liability in accordance with legislation of the Russian Federation.

4. Fulfillment of this Law is monitored by state government and administrative bodies, bodies of local self-management, courts and military administrative bodies. Surveillance is maintained over fulfillment of legislation of the Russian Federation on the status of servicemen and on the legal and social guarantees to citizens discharged from active duty and their families by the General Procurator of the Russian Federation and procurators subordinated to him.

Article 4. Legislation of the Russian Federation on the Status of Servicemen and on Legal and Social Guarantees to Citizens Discharged From Active Duty and Their Families

Legislation of the Russian Federation on the status of servicemen and on legal and social guarantees to citizens discharged from active duty and their families is based on the Constitution of the Russian Federation and includes this Law, other legislative acts of the Russian Federation and international treaties of the Russian Federation.

Section II. Rights of Servicemen, Citizens Discharged From Active Duty and Their Families

Article 5. Defense of the Freedom, Honor and Merit of Servicemen

1. Servicemen are under the protection of the state. No one has the right to interfere in the official activities of servicemen, except for persons empowered to do so by legislation.
2. Insults to servicemen, violence and the threat of the use of violence, transgressions upon their lives, health, honor, merit, housing and property, and equally so, other actions violating and infringing upon their rights in connection with fulfillment of the responsibilities of military service are recognized to be aggravating circumstances in the determination of liability and sentencing.
3. Servicemen may be detained or placed under arrest, to include confinement in a guard room, only on the basis of grounds foreseen by legislation of the Russian Federation and general military regulations of the Armed Forces of the Russian Federation.

Article 6. The Freedom to Travel and the Right to Choose a Place of Residence

1. The right to free travel is exercised by servicemen with regard for the need for maintaining the combat readiness of military units and ensuring prompt arrival of servicemen at their place of service.

Inducted active duty servicemen have the right to travel freely at the location of military units and within garrisons to which they have been discharged out of military units.

2. Servicemen depart from garrisons in which they are serving active duty in accordance with policy determined by general military regulations of the Armed Forces of the Russian Federation, and outside the Russian Federation, in accordance with policy established by legislation of the Russian Federation.
3. Contracting active duty servicemen have the right to change their place of active duty, including transfer to another location, in accordance with contracts signed by them and with regard for the conditions of active duty, the health of the servicemen and their families (based on conclusions of a military medical board), and on the basis of other grounds established by the Statute on the Procedures of Military Service.
4. Contracting active duty servicemen, and such servicemen who are discharged into the reserves or retired, have the right to choose their permanent place of residence in any population center of the Russian Federation.
5. When changing their places of active duty, contracting active duty servicemen as well as such servicemen who retire from active duty upon reaching the maximum age of military service, for health reasons or in connection with organizational and staffing measures, and members of their families who are attending state educational institutions are transferred at their request and accepted by

educational institutions closest to the new place of active duty or residence (if such educational institutions are available).

Article 7. Freedom of Speech. The Right to Participate in Rallies, Meetings, Marches and Demonstrations

1. Servicemen exercising the right of free speech, of free expression of their opinions and convictions and of obtaining and distributing information must not disclose state and military secrets, or discuss and criticize orders of commanders (superiors).
2. Servicemen are entitled to participate in rallies, meetings, marches, demonstrations and pickets on their own time if such actions do not pursue political goals and are not prohibited by state government and administrative bodies and bodies of local self-management.

Servicemen take part in meetings and other public measures while on duty in accordance with policy foreseen by general military regulations of the Armed Forces of the Russian Federation.

3. Participation of servicemen in strikes is prohibited.

Article 8. Freedom of Conscience and Religion

1. Servicemen are entitled to participate in religious services and ceremonies as private individuals when off duty.
2. Servicemen do not have the right to refuse to perform their official duties out of religious considerations and use their official power to propagandize a particular attitude toward religion.
3. Religious symbols, religious literature and articles of worship are used by servicemen on an individual basis.
4. The state bears no responsibility for satisfying the needs of servicemen associated with their religious convictions and the need for observing religious rites.
5. Establishment of religious associations in military units is not permitted.

Article 9. The Right to Participate in Management of Social and State Affairs

1. Servicemen have the right to elect and to be elected to bodies of state government and bodies of local self-management in accordance with the Constitution of the Russian Federation and this Law.

The particular features of the legal status of servicemen elected to state government bodies and bodies of local self-management are determined by legislation of the Russian Federation and this Law.

2. Servicemen may join public associations that do not pursue political goals, and participate in their activity at times that they are not fulfilling the duties of military service.

Article 10. The Right to Work

1. The right to work is exercised by servicemen through their military service. The state guarantees the following to contracting active duty servicemen:

—work in military positions, career advancement and promotions in accordance with acquired professional qualifications, results achieved in official duties, and on a competitive basis;

—upgrading of professional qualifications with regard for the interests of military service and their personal choice.

2. The nature of the official duties of inducted active duty servicemen and their career advancement are determined by professional qualifications and the needs of the service.

3. The time citizens serve in the military on a contract basis is included in the total working time and the time of work in a specialty at a rate of 1 month of active duty for 1 month of work, while for citizens serving on the basis of induction orders the ratio is 1 month of active duty for 2 months of work.

4. In addition to working time, the entire period that wives (husbands) of contracting active duty servicemen reside together with their husbands (wives) in places where they were unable to work in their specialty and in connection with the absence of employment possibilities is included in the total work time used to compute pensions. During this same period monthly assistance is paid to the wives (husbands) of the indicated servicemen in amounts and in accordance with policy determined by the government of the Russian Federation.

5. Additional advantages are established by this Law for servicemen serving active duty in regions of the Far North and other locales with unfavorable climatic or ecological conditions, as well as in military positions at which fulfillment of the obligations of military service is associated with heavy physical labor or increased danger to life and health.

The lists of indicated regions and locales as well as military positions are determined by the government of the Russian Federation.

6. Under otherwise equal conditions, the wives (husbands) of servicemen and of citizens discharged from active duty enjoy a preferential right to jobs at state (municipal) enterprises and at state (municipal) institutions and organizations, to retention of their jobs at state (municipal) enterprises and in state (municipal) institutions and organizations at times of work force reductions, and to priority assignment to professional training, advanced training and retraining on leave from production, together with payment of scholarships during the time of training, in accordance with policy established by the government of the Russian Federation.

7. Servicemen do not have the right to combine military service with work at enterprises and in institutions and organizations, with the exception of scientific, educational and creative activity, if it does not interfere with fulfillment of the duties of military service. Servicemen are prohibited from using their official position to aid natural

and legal persons in entrepreneurial activity, and from obtaining compensation and advantages for this.

8. Use of servicemen in jobs unrelated to the responsibilities of military service is permitted in cases established by legislation. In this case advantages foreseen for other citizens performing these jobs are extended to servicemen.

Article 11. Working Time and the Right to Time Off

1. The total duration of the weekly working time of contracting active duty servicemen must not exceed the normal duration of weekly working time established by labor legislation of the Russian Federation, except in cases indicated in Clause 3 of this article.

When contracting active duty servicemen are required to perform the duties of military service for a time exceeding the established duration of weekly working time and it is impossible to compensate this by time off on other days of the week, such time is summed and provided to servicemen in the form of additional days of leave, which may be attached to a regular leave. The procedure for reckoning working time in these cases and for granting additional days of leave is determined by the Statute on Procedures of Military Service.

2. The duration of the working time of inducted active duty servicemen is determined by the order of the day of the military unit in accordance with requirements of general military regulations of the Armed Forces of the Russian Federation. In this case they are provided not less than 8 hours of sleep and 2 hours of personal time each day, except in cases determined by the general military regulations of the Armed Forces of the Russian Federation.

3. Alert duty (combat duty), exercises, ship cruises and other measures on a list determined by the defense minister of the Russian Federation and by executives of other ministries and departments of the Russian Federation in the forces of which servicemen undergo military service, are conducted as necessary without a limit on the total duration of weekly working time.

4. Inducted active duty servicemen and contracting active duty servicemen serving in institutions of professional military education and military training units are granted not less than 1 day off each week. All other contracting active duty servicemen are granted not less than 1 day off each week, but not less than 6 days off a month.

Days off are granted to servicemen on days off and holidays, while when they are required to perform the duties of military service on these days, they are granted time off on other days of the week in accordance with policy determined by general military regulations of the Armed Forces of the Russian Federation.

5. Contracting active duty servicemen are granted a regular leave each year.

The duration of regular leave is established as follows:

—for servicemen with a total time of active duty of less than 10 years, calculated on favorable terms—30 days;

- for servicemen with a total time of active duty of 10 or more years, calculated on favorable terms—35 days;
- for servicemen with a total time of active duty of 15 or more years, calculated on favorable terms—40 days;
- for servicemen with a total time of active duty of 20 or more years, calculated on favorable terms—45 days.

Inducted active duty servicemen serving in military positions defined by the table of organization as private and seaman positions are granted one regular leave of 15 days' duration, while those filling military positions defined by the table of organization as NCO and petty officer positions are granted 20 days. Inducted active duty servicemen whose term of active duty is 24 months are granted a regular leave increased by 15 days.

The duration of regular leave granted to the indicated servicemen may be increased or decreased by up to 5 days as a reward or punishment in accordance with policy determined by general military regulations of the Armed Forces of the Russian Federation.

Servicemen participating in war as well as those filling positions in which performance of the duties of military service is associated with heavy physical labor or an elevated danger to life and health, and servicemen undergoing active duty in regions of the Far North and other locales with unfavorable climatic or ecological conditions are granted an extension of up to 15 days to their annual regular leave, or they are granted additional days off in accordance with norms established by the Statute on Procedures of Military Service. In this case the total duration of annual regular leave together with additional days off may not exceed 60 days, not counting the time of travel to and from the place of leave.

Servicemen graduating from a professional military educational institution are granted their regular leave upon graduation from the indicated military educational institution.

Regular leave may be granted in parts by commanders (superiors) at the request of contracting active duty servicemen.

The duration of the regular leave of servicemen is increased by the number of days necessary for travel to and from the place of leave. If servicemen are granted regular leave in parts, then the time of travel to and from the place of leave is granted once.

6. Contracting active duty servicemen are granted training leaves for training and to take entrance examinations for postgraduate study and military doctorate study, as well as to take entrance examinations for admission to professional educational institutions and for the time of study in them, in accordance with policy established by legislation.

7. Contracting active duty servicemen and cadets of professional military educational institutions (prior to their signing a contract) are granted school leave during study breaks while attending the indicated military educational institutions for a time period determined by the Statute on Procedures of Military Service.

8. Contracting active duty servicemen pursuing academic degrees of candidate or doctor of sciences are granted creative leaves in accordance with policy established by legislation.

9. Servicemen are granted sick leave on the basis of the conclusions of a military medical board.

10. Personal leaves of up to 10 days are granted to servicemen;

—in the event of the ill health or death of a close relative of the serviceman (father, mother, wife, husband, son, daughter, brother or sister) or of a person who had raised the serviceman;

—in the event of fire or other natural disaster suffered by the family or by a close relative of the serviceman.

Inducted active duty servicemen may also be granted leave for personal reasons of up to 10 days in other exceptional cases when the serviceman's presence in the family is decided to be necessary by the military unit commander.

The time of personal leave granted to servicemen in accordance with this clause is increased by the number of days necessary for travel to and from the place of leave by ground (water) transportation.

In 1 year of the 3 years prior to reaching the maximum age of active duty, servicemen with a total time of active duty of 20 or more years are granted personal leave of 30 days in addition to regular leave.

11. Servicewomen are granted pregnancy and maternity leave as well as child care leave in accordance with policy established by legislation of the Russian Federation.

12. Leaves foreseen in clauses 6, 8-11 of this article are additional leaves, and are not reckoned as part of regular leave.

Article 12. Pay

1. The pay of servicemen consists of monthly pay corresponding to the military position occupied (hereinafter referred to as position pay) and monthly pay corresponding to rank (hereinafter referred to as rank pay) which make up the monthly pay of servicemen (hereinafter referred to as pay), of monthly and other allowances (hereinafter referred to as allowances), and of other additional monetary payments (hereinafter referred to as payments).

2. The amounts of position and rank pay, allowances and payments are determined by the government of the Russian Federation at the recommendation of the Russian Federation Ministry of Defense and of other ministries and departments of the Russian Federation in which military service is foreseen by law.

In this case the pay of the primary military positions of contracting active duty privates and seamen cannot be less than five times the minimum wage, while rank pay cannot be less than one half of position pay.

3. The procedure of paying servicemen is determined by the Russian Federation Ministry of Defense and by other ministries and departments of the Russian Federation in which military service is foreseen by law.

Article 13. Additional Payments

1. By decision of the military unit commander and on the basis of the results of the calendar (training) year, contracting active duty servicemen who fulfill their official duties conscientiously may be paid a one-time monetary reward of an amount established by the government of the Russian Federation, but not less than three times the monthly pay.

2. Inducted active duty servicemen, cadets of professional military educational institutions departing for regular leave and for sick leave (on the basis of a conclusion of a military medical board) are paid an amount equal to not less than the monthly pay.

3. When contracting active duty servicemen move to a new place of residence in connection with transfer to a new place of active duty or in connection with transfer of the military unit (subunit), they are paid:

two months' pay for the serviceman and half a month's allowance for each member of his family moving with him;

an amount based on a firm rate (daily) established by the government of the Russian Federation for workers on temporary duty, for each day the serviceman is en route, and for each member of his family moving with him.

4. When inducted active duty servicemen move in connection with transfer to a new place of active duty or in connection with transfer of the military unit (subunit), they are paid an amount based on a firm rate (daily) established by the government of the Russian Federation for workers on temporary duty, or they are issued a food ration for every day that they are en route.

5. Except for cadets of professional military educational institutions, contracting active duty servicemen have the right to obtain payments for initial establishment of a household, from assets of the Russian Federation Ministry of Defense and other ministries and departments of the Russian Federation in which military service is foreseen by law, in the form of an interest-free loan in an amount of up to 20 times the monthly pay of these servicemen with a term of up to 3 years, in one of the following cases:

—within 3 months from the moment of assignment to a military position following graduation from a professional military educational institution and acquisition of the first officer's rank;

—in the course of 3 months following assignment to a military position upon signing the first contract for military service for a term of 5 or more years;

in the course of 3 months from the moment of a first marriage.

6. Servicemen sent on temporary duty are compensated for their temporary duty expenses in amounts and according to procedures established by the government of the Russian Federation.

7. Besides payments foreseen by this Law, the President of the Russian Federation, the government of the Russian Federation and, within allocation limits, the minister of

defense of the Russian Federation and directors of other ministries and departments of the Russian Federation in which military service is foreseen may establish additional payments to servicemen.

Article 14. Food and Clothing Support, Trade and Personal Services

1. Servicemen are provided food support in accordance with a statute on food support to servicemen approved by the government of the Russian Federation in one of the following forms:

—organization of messing at the place of active duty—for inducted active duty servicemen and for individual categories of contracting active duty servicemen, the list of which is approved by the government of the Russian Federation;

—issue of food rations;

—payment of monetary compensation in lieu of issue of food rations equal to their cost—for contracting active duty servicemen, at their request and with the permission of the military unit commander.

—rather than being issued food rations, inducted active duty servicemen departing on leave or on temporary duty are paid monetary compensation.

2. Servicemen are provided clothing depending on the conditions of military service and in accordance with the Statute on Clothing Support of Servicemen approved by the government of the Russian Federation.

At the request of contracting active duty servicemen, instead of issuing certain articles of clothing to them, a military unit commander is entitled to grant permission for issue of monetary compensation equal to the cost of these articles.

3. Servicemen are provided bath and laundry services according to norms established by the government of the Russian Federation and in accordance with policy determined by general military regulations of the Armed Forces of the Russian Federation and other normative acts.

4. Servicemen and their families are granted the right to obtain industrial goods, food products and the products of public food services at reduced prices through the trade network.

The policy of selling industrial goods and food products as well as of rendering services to servicemen at reduced prices is established by the Statute on Military Trade, approved by the government of the Russian Federation.

The advantages indicated in this clause also extend to citizens discharged from active duty and to their families residing on the territories of military installations.

Article 15. The Right to Housing

1. The state guarantees housing space for servicemen.

Contracting active duty servicemen and family members residing together with them are granted housing space on the basis of norms and according to policy foreseen by

housing legislation not later than 3 months from the day of arrival at a new place of active duty; such housing is provided out of state, municipal and departmental housing pools placed at the disposal of the Russian Federation Ministry of Defense and other ministries and departments of the Russian Federation in the forces of which such servicemen are serving active duty.

In the first 5 years of active duty (not counting training time in professional military educational institutions) the indicated servicemen are granted base housing or dormitory space. During this time, they and their families retain the right to housing space occupied prior to entering military service. Their names may not be removed from lists of persons requiring improvement in their housing conditions at their place of residence prior to induction (entry) into military service. When the duration of active duty is greater than the indicated times, they are allotted housing space on a universal basis.

Contracting active duty servicemen that have been provided housing space have the right to improve housing conditions during the time of active duty with regard for housing space norms, waiting lists and advantages established by this Law and housing legislation.

Contracting active duty servicemen are granted the right to join housing construction (housing) cooperatives or to obtain land parcels for construction of private dwellings if they so desire.

2. State government and administrative bodies, bodies of local self-management, enterprises, institutions and organizations involved in housing construction are obligated to accept, as a state order, and promptly utilize assets allocated by military administrative bodies for the construction of housing for servicemen, or to sell them apartments or private dwellings on advantageous terms established by the government of the Russian Federation.

3. Contracting active duty servicemen and their families are registered at their request to the addresses of military units until acquisition of housing space. Prior to acquisition of housing space, the indicated servicemen and their families are allotted housing space or dormitories suitable for temporary residence. In the event of the absence of such housing space, military units are obligated to lease it in behalf of servicemen and their families, or if servicemen so desire, to pay monetary compensation for leasing (subletting) housing space in an amount stipulated by a housing lease (sublease).

Bodies of local self-management are obligated to assist military units in finding housing space to lease (sublet), suitable for temporary residence of servicemen and their families.

4. When transferred to a new place of active duty in another location, contracting active duty servicemen who own their own apartments or private dwellings or who are members of housing construction (housing) cooperatives, as well as servicemen who retain housing space in accordance with legislation at their place of residence prior to entering military service, and members of their families

residing with them, are allotted base housing or dormitory space for the time of active duty at the given location.

5. Housing space in buildings belonging to state, municipal and department housing pools to which contracting active duty servicemen are registered and in which they reside is reserved for permanent use by the Russian Federation Ministry of Defense and by other ministries and departments of the Russian Federation in the forces of which servicemen serve active duty. When the indicated housing space is vacated, it is once again reoccupied by servicemen and their families.

6. Citizens discharged from active duty upon reaching the maximum age of active duty, for health reasons or in connection with organizational and staffing measures after a total time of active duty of 10 or more years, and their families are provided housing space by bodies of local self-management on the basis of established norms not more than 3 months after an application is submitted to add their names to lists of persons waiting for improvement of their housing conditions in a selected permanent place of residence. Documents attesting to surrender of housing space and discharge from the former place of residence are furnished by the indicated citizens and their families upon receipt of permanent housing space.

When it is impossible to allot housing space on the basis of established norms within 3 months' time, bodies of local self-management are obligated to temporarily accommodate citizens discharged from active duty and their families in housing space, or pay them monetary compensation for leasing (subletting) housing space in an amount stipulated by a housing lease (sublease). With the consent of citizens discharged from active duty, bodies of local self-management may provide assets for the construction or acquisition of housing in an amount determined by the government of the Russian Federation.

Three years prior to being discharged upon attaining the maximum age of active duty, or within the year of discharge from active duty for health reasons or in connection with organizational and staffing measures, in response to a petition of commanders (superiors) bodies of local self-management at a selected permanent place of residence add the names of contracting active duty servicemen to the list of persons requiring improvement of housing conditions or desiring membership in housing construction (housing) cooperatives. Bodies of local self-management communicate a decision to the serviceman within 3 months' time.

7. Military unit commanders and officers with the rank of colonel (captain 1st rank) or higher are allotted additional housing space or an additional room not less than 10 square meters in size above the established norm. The same right is granted to servicemen serving as instructors at professional military educational institutions and in military departments of state educational institutions providing higher professional education, and to scientific workers possessing an academic degree or title. The right to additional housing space or an additional room is also retained by the indicated servicemen following discharge

from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures.

The policy and conditions of allotting additional housing space or an additional room are established by legislation of the Russian Federation.

8. Housing space in buildings belonging to state, municipal and departmental housing pools occupied by contracting active duty servicemen sent abroad, into regions of the Far North and to other locations with unfavorable climatic or ecological conditions for military service is reserved for them for the entire time of their presence abroad or in the indicated regions and locations.

Servicemen for whom housing space is reserved are allotted base housing or dormitory space at the new place.

9. Contracting active duty servicemen and citizens discharged from military service upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures with a total time of active duty of 20 or more years pay not more than 50 percent for all housing space occupied by them and by members of their families residing together with them in residential buildings belonging to state, municipal and departmental housing pools, for communal services regardless of ownership of the housing space, and for installation and use of apartment telephones. In residential buildings lacking central heating, they are given a discount amounting to not less than 50 percent of the cost of fuel acquired within the norms established for sale of fuel to the public at large.

10. Servicemen with a total time of active duty of 20 or more years as well as citizens discharged from active duty with the indicated time of active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures have the right to acquire ownership of the housing space they occupy, regardless of its dimensions, in residential buildings belonging to state, municipal and departmental housing pools (except in closed military installations), without compensation.

11. Inducted active duty servicemen are accommodated in accordance with requirements of general military regulations of the Armed Forces of the Russian Federation.

Inducted active duty servicemen and cadets of professional military educational institutions retain housing space occupied by them prior to induction (entry) into military service. They may not be excluded from lists of persons requiring improvement of housing conditions.

12. Bodies of local self-management are obligated to grant the right to join housing construction (housing) cooperatives or allocate land parcels for the construction of private housing on priority to contracting active duty servicemen and citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures with a total time of active duty of 10 or more years, as well as to

persons who serve active duty abroad, in regions of the Far North and in other locations with unfavorable climatic or ecological conditions.

13. The families of servicemen and citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures and their families who are forced to abandon regions in which it is dangerous to live (refugees) are registered without impediments at a new place of residence by bodies of local self-management. If they so desire, they are granted the priority right to join housing construction (housing) cooperatives, or land parcels are allocated to them for construction of private housing, or apartments or individual homes are sold to them from state, municipal and departmental housing pools on advantageous terms determined by the government of the Russian Federation.

14. Servicemen who do not possess housing space for permanent residence or who require improvement of housing conditions, who have joined housing construction (housing) cooperatives or who are building (purchasing) private homes on the basis of norms foreseen by housing legislation are provided uncompensated financial assistance of the following amounts at the place of their military service out of assets of the Ministry of Defense of the Russian Federation and of other ministries and departments of the Russian Federation in the forces of which they are serving active duty:

—those with a total time of active duty from 10 to 25 years—not less than 75 percent; those with a total time of active duty of 25 or more years—100 percent of the cost of housing space belonging to housing construction (housing) cooperatives, or of a bank loan obtained for construction of private homes. This benefit also applies to citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures.

Losses of banks are compensated out of the republic budget of the Russian Federation according to policy established by the government of the Russian Federation.

Article 16. The Right to Protection of Life and Health, and to Health Care

1. Protection of the life and health of servicemen is ensured by creation of healthy conditions of military service and personal life, and by a system of measures limiting dangerous factors of military service implemented by commanders (superiors) in coordination with state government and administrative bodies of the Russian Federation.

Concern for preserving the life and health of servicemen is a responsibility of commanders (superiors). It is their responsibility to satisfy safety requirements associated with exercises and other combat training measures, with execution of the responsibilities of military service, with operation of armament and military equipment and with work.

2. Servicemen have the right to free health care in military medical subunits, units and establishments (hereinafter referred to as military medical establishments). In the absence of military medical establishments at the place of active duty or at the place of residence of servicemen, or when they lack the corresponding departments or special medical equipment, as well as in emergency cases, health care is provided without impediments and free of charge in public health institutions regardless of their departmental subordination and form of ownership. Money paid for treatment by servicemen is compensated by the Russian Federation Ministry of Defense and by other ministries and departments of the Russian Federation in which military service is foreseen.

Each year servicemen undergo medical examinations, and they are subjected to therapeutic and preventive measures. Servicemen showing signs of mental disorder are scheduled for certification and hospital examination in accordance with the Russian Federation law "On Psychiatric Care and the Guarantees of Rights of Citizens When It Is Rendered."

3. The families (wives, husbands, children up to 18 years) of officers and their dependents have the right to free health care in military medical establishments. In the case of outpatient treatment, pharmaceuticals are sold to family members at retail prices, except in cases where no charge is made in accordance with legislation. In the absence of military medical establishments at the place of residence of the families of servicemen or when they lack the corresponding departments or special medical equipment, as well as in emergency cases, health care is provided in public health institutions on a universal basis together with other citizens of the Russian Federation.

4. When on leave, servicemen (except inducted active duty servicemen and cadets of professional military educational institutions) and their families are provided paid sanatorium and health resort treatment and organized rest at sanatoriums, vacation homes, boarding hotels, tourist bases of the Russian Federation Ministry of Defense or at sanatoriums, health resorts and health improvement institutions of other ministries and departments of the Russian Federation. In this case the indicated servicemen are paid monetary compensation amounting to six times the minimum wage established by law at the moment of departure on leave for the serviceman himself and three times the minimum wage established by law for the wife (husband) and each underaged child, regardless of whether or not a pass is obtained.

Passes are provided free of charge to the indicated servicemen and their families when sent to a sanatorium for continuation of hospital treatment.

After their hospital treatment, servicemen who suffer a disabling injury (wound, trauma, contusion) or fall ill during the performance of the duties of military service have the right to priority acquisition of passes to sanatoriums, health resorts and health improvement institutions of the Russian Federation Ministry of Defense and other ministries and departments of the Russian Federation in

which military service is foreseen by law, at their own choice and in accordance with a conclusion of a military medical board.

5. The rights and benefits of servicemen and their families indicated in clauses 2-4 of this article extend to officers discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures, whose time of active duty is 20 or more years (calculated under favorable terms), and to their families.

6. Servicemen and citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures and war veterans enjoy a preferential right to obtain health care and sanatorium and health resort treatment.

Servicewomen enjoy the rights and benefits foreseen by legislation on protection of the family, maternity and childhood.

7. Inducted active duty servicemen and cadets of professional military educational institutions are provided sanatorium and health resort treatment free of charge when the medical indications exist.

Upon departure on sick leave, the indicated servicemen are paid a treatment subsidy amounting to four times the minimum wage established by law.

Cadets of professional military educational institutions and graduates of institutions of secondary (complete) general education who have undergone a supplementary educational program providing military training to underaged citizens are paid not more than 30 percent of the cost of passes to military tourist bases.

8. The expenses of providing health care to servicemen, their families, and to citizens discharged from active duty in military medical establishments, and monetary compensations indicated in Clause 4 of this article are covered according to policy determined by the government of the Russian Federation by the Russian Federation Ministry of Defense and by other ministries and departments of the Russian Federation within the forces of which they serve (served) active duty.

Article 17. The Right of Ownership. Tax Advantages

1. The state guarantees that servicemen, citizens discharged from active duty and their families will obtain a share of state property in the course of its privatization on an equal basis with other citizens.

2. Land parcels are transferred, in accordance with a procedure established by law, to the ownership of contracting active duty servicemen whose total time of active duty is 10 or more years, or if they so desire, they are granted for lifelong possession with the right of inheritance; the sizes of these land parcels, which are provided free of charge at the place of active duty, are:

—for individual housing construction—0.10 hectare in cities and urban settlements; the size of the land parcel

is determined in rural areas by bodies of local self-management, but at not less than 0.25 hectare;

—for collective gardening or for a private plot—up to 0.25 hectare (0.12 hectare in regions of irrigated farming).

3. Parcels are transferred to the ownership of contracting active duty servicemen whose total time of active duty is 15 or more years within 3 years of being discharged from active duty due to age, and to citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures whose total time of active duty is 15 or more years, or they are granted to them for lifelong possession with the right of inheritance by state government and administrative bodies and by bodies of local self-management at a selected place of residence:

—for individual housing construction and private plots—0.10 hectare in cities and urban settlements; 0.25 hectare in rural areas;

—for peasant (commercial) farming after discharge from active duty—of sizes established by legislation of republics within the Russian Federation and by normative acts of state government bodies and bodies of local self-management, but not less than 0.30 hectare.

4. If they so desire, servicemen whose total time of active duty is 20 or more years are provided the possibility for obtaining motor vehicles, tractor equipment and other property belonging to military units, at current prices with regard for wear.

5. Servicemen are released from paying income tax on pay, monetary rewards and other payments they receive in connection with fulfillment of the duties of military service, and from paying land tax and the property tax of natural persons.

Citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures whose total time of active duty is 20 or more years are released from paying land tax and the property tax of natural persons.

6. Servicemen as well as citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures and their families may be released partially or completely from payment of other taxes and fees by bodies of local self-management.

Article 18. Insurance Guarantees for Servicemen. The Right to Compensation for Damages

1. Servicemen and citizens ordered to attend military training are subject to mandatory state personal insurance covering death due to hostile action, accident or natural causes, or disabling injury (wound, injury, contusion) and illnesses acquired during active duty (military training).

The procedure for paying insurance money is established by the government of the Russian Federation.

2. In the event of the death due to hostile action, accident or natural causes of servicemen (citizens ordered to attend military training), occurring upon their fulfillment of the responsibilities of military service (at military training), or their death occurring prior to expiration of 1 year from the day of discharge from active duty (conclusion of military training) as a result of disabling injury (wound, injury, contusion) and illnesses acquired by them during performance of the duties of military service (at military training), a one-time assistance payment amounting to 120 times the monthly pay is paid (in equal shares) to members of their families—wives (husbands), children under 18 years of age (students up to 23 years of age), or to children above this age if they had become disabled prior to reaching 18 years of age, and to fathers and mothers. The amount of the one-time assistance paid to inducted active duty servicemen, to citizens ordered to attend military training or to their families in accordance with clauses 2-4 of this article is equal to the minimum wage established by law on the day of death due to hostile action, accident or natural causes, or of disabling injury (wound, injury, contusion).

3. When in connection with their fulfillment of the responsibilities of military service, servicemen suffer a crippling injury (wound, injury, contusion) or illness precluding their further active duty, they are paid a one-time assistance payment equal to 60 times the monthly pay.

4. The property of contracting active duty servicemen is subject to full mandatory state insurance.

5. The state guarantees compensation to servicemen for moral and material damage inflicted by the unlawful actions of officials of state government and administrative bodies, of bodies of local self-management, of military administrative bodies, enterprises, institutions, organizations and public associations, as well as other persons resulting from: unlawful criminal or other punishment; unlawful use of confinement under guard as preventive measure; unlawful condemnation; unlawful reduction in position or rank; failure to observe the terms of the contract; unlawful forfeiture of rights and advantages.

Rights of servicemen are restored and damages are compensated at the expense of the perpetrators or the republic budget of the Russian Federation by decision of state government and administrative bodies, bodies of local self-management, commanders (superiors) within the limits of their competency, or the court.

6. Compensation for damages and guarantee of legal and social protection of servicemen who suffer as a result of tests, accidents and operation of military or civilian nuclear facilities, and the policy of military service on territories subjected to radioactive contamination, are determined by legislation of the Russian Federation.

7. Servicemen and citizens ordered to attend military training who are killed on active duty or who die as a result of a disabling injury (wound, injury, contusion) or disease are buried at the place of active duty (military training) or, if their relatives so desire, in another place. All expenses of preparing the body for transport, transporting the body,

burial, and manufacture and installation of a headstone are borne by the Russian Federation Ministry of Defense and other ministries and departments of the Russian Federation in the forces of which servicemen and citizens ordered to attend military training had served active duty (attended military training), in accordance with norms established by the government of the Russian Federation.

The provisions indicated in this clause extend to citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures whose total time of active duty is 25 or more years, as well as to war veterans regardless of the total time of active duty.

The policy of military honors during burial is determined by general military regulations of the Armed Forces of the Russian Federation.

Article 19. The Right to Education and Rights in the Area of Culture

1. Servicemen have the right to study in professional military educational institutions and in training, retraining and advanced training courses (faculties).
2. Contracting active duty servicemen have the right to study in professional civilian educational institutions without being released from performing the duties of military service, and in the preparatory departments (courses) of higher and secondary special educational institutions.
3. Inducted active duty servicemen are prohibited from attending professional civilian educational institutions.
4. Citizens ordered to active duty while attending professional state educational institutions retain the right to continue their education upon discharge from active duty in the educational institution they had attended prior to receiving orders.

Citizens discharged from active duty enjoy the preferential right of admission to professional state educational institutions and preparatory departments (courses) of institutions of higher education.

Citizens who are discharged from active duty and who enter professional state educational institutions at the recommendations of commanders (superiors) enjoy the right of noncompetitive enrollment, on the condition that they receive positive scores on entrance examinations.

Contracting active duty citizens discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures have the right:

- to free priority admission to training, retraining and advanced training and to payment of the average wage of a selected specialty during training;
- to noncompetitive admission to state educational institutions providing basic professional education and to training courses of the corresponding professions;

—to admission to professional state educational institutions without taking entrance examinations: to the first and subsequent years of institutions of higher education—citizens with an incomplete higher or a higher education; to preparatory departments (courses) of institutions of higher education—citizens who had graduated from secondary educational institutions; to the first and subsequent years of secondary special educational institutions—citizens who had graduated from secondary military educational institutions;

—to the first year of secondary special educational institutions—citizens with not less than an eight-year education.

The indicated persons are admitted to professional state educational institutions throughout the entire training year and outside the admission quotas established for these educational institutions.

Servicemen with a higher or secondary civilian professional education kindred in profile to training in a military specialty who serve active duty in this specialty are equated in education to servicemen who had graduated from the corresponding professional higher or secondary military educational institutions.

Professional higher and secondary military educational institutions provide—concurrently with the special educational program—educational programs that prepare specialists in kindred (associated) civilian sectors, and they issue the corresponding educational documents to graduates.

Citizens who graduate from professional higher military educational institutions and who are hired by educational institutions as instructors are equated in education and wages to citizens who had graduated from higher pedagogical educational institutions.

5. Servicemen enjoy rights and freedoms in the area of culture on an equal basis with other citizens.

Inducted active duty servicemen, cadets of professional military educational institutions and graduates of educational institutions providing secondary (complete) general education together with an additional program having the purpose of military training of underaged citizens enjoy advantages when attending paid measures organized by cultural and sports institutions.

The indicated advantages are determined by bodies of local self-management.

6. Servicemen use the services of libraries and reading halls, cultural and educational property and sports facilities and equipment and view motion pictures and videotapes free of charge at the locations of military units.

7. Commanders (superiors) are obligated to develop and implement a system of measures of patriotic, moral and aesthetic education of servicemen, to instill respect for national traditions in them, and to create conditions for development of amateur creativity.

Article 20. Use of Transportation. Mail**1. Servicemen have the right to free travel:**

—on railroad, air, water and motor (except taxi) transport on temporary duty, in connection with transfer to a new place of active duty, to and from places of regular leave (once a year), additional leaves and treatment, and to a permanent place of residence upon discharge from active duty;

—on all forms of public transportation of urban, suburban and local transportation systems (except taxis).

In addition contracting active duty servicemen have the right of free shipment, on all forms of transport except air, of 20 tonnes of personal effects from a former place of residence to a new place of residence in connection with transfer to a new place of active duty and upon discharge from active duty.

2. The families of contracting active duty servicemen have the right to free travel:

—from the place of residence to the place of active duty of servicemen in connection with their transfer to a new place of active duty;

—once a year—to and from a place of leave on the basis of grounds established for servicemen;

—upon discharge of servicemen from active duty—to the selected place of residence.

3. Officers discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures whose total time of active duty is 20 or more years (calculated under favorable terms) have the right to free travel to and from for hospital treatment based on a conclusion of a military medical board or to and from sanatorium, health resort and health improvement institutions (once a year). The same right of travel is also possessed by the families of the indicated officers traveling to sanatorium, health resort and health improvement institutions.

4. Servicemen have the right to acquire travel documents for all forms of transportation on priority when traveling on official business trips, to a new place of active duty and to and from a place of leave. In this case contracting active duty servicemen sent on temporary duty enjoy the right of reserving and obtaining hotel rooms on priority on the basis of their temporary duty certificate.

5. Expenses associated with conveyance of servicemen, citizens discharged from active duty, their families and personal effects on the territory of the Russian Federation, and of reserving hotel rooms by servicemen on official business trips, are compensated by the Russian Federation Ministry of Defense and by other ministries and departments of the Russian Federation in the forces of which they are serving (served) active duty, in accordance with policy established by the government of the Russian Federation, and outside the Russian Federation, in accordance with international treaties.

6. Contracting active duty servicemen using personal transportation for official purposes are paid monetary compensation in accordance with procedures and in amounts established by the government of the Russian Federation.

7. Inducted active duty servicemen have the right to free mailing of letters dispatched by military units. Letters addressed to inducted active duty servicemen at their place of active duty are sent free of charge. The personal clothing of citizens ordered to active duty is sent by parcel post free of charge.

Article 21. The Right of a Serviceman to Appeal Illegal Actions

1. Servicemen have the right to defend their rights and lawful interests by appealing to a court in accordance with policy established by legislation of the Russian Federation.

2. Illegal decisions and actions of military administrative bodies and commanders (superiors) may also be appealed in accordance with policy foreseen by general military regulations of the Armed Forces of the Russian Federation.

Article 22. Discharge of Citizens From Active Duty and the Right to Job Placement

1. Servicemen (except inducted active duty servicemen) may not be discharged from active duty contrary to their wishes prior to acquisition of the right to a pension based on time of service, except in cases of early discharge on grounds indicated in the Russian Federation law "On the Military Obligation and Military Service."

Servicemen who had served 10 or more years may not be discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures without being offered housing space for themselves and their families in accordance with norms established by legislation.

2. In the event of unjustified discharge of contracting active duty servicemen from active duty, the damages they suffer in connection with this are subject to compensation in the full amount. The indicated servicemen are reinstated to active duty in their former position (and with their consent—a position that is equal or not lower), and receive all forms of pay that they failed to receive after unjustified discharge. This period is included in the total time of active duty and in the time determined for promotion in rank.

Servicemen are reinstated to active duty in the indicated cases in accordance with the Statute on Procedures of Military Service.

3. Servicemen discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures are paid one-time assistance when their total time of service is:

—less than 10 years—in an amount equal to five times the monthly pay;

—from 10 to 15 years—in an amount equal to 10 times the monthly pay;

- from 15 to 20 years—in an amount equal to 15 times the monthly pay;
- over 20 years—in an amount equal to 20 times the monthly pay.

The content and policy of paying the one-time assistance indicated in this clause to citizens discharged from active duty on the basis of other grounds are determined by the government of the Russian Federation.

The amount of the one-time assistance paid to servicemen who had been awarded a state order (orders) during active duty is increased by two times the monthly pay.

When inducted active duty servicemen are discharged from active duty, they are paid one-time assistance equal to the minimum wage established by law, while the indicated persons who are orphans and children left without parental support are paid one-time assistance equal to five times the minimum wage established by law.

4. Contracting active duty servicemen with a total time of service of from 15 to 20 years who are discharged from active duty upon attaining the maximum age of active duty, for health reasons and in connection with organizational and staffing measures without the right to a pension are paid monthly social assistance for a period of 5 years amounting to: with a total time of service of 15 years—40 percent of monthly pay; for every year over 15 years—3 percent of monthly pay.

The indicated servicemen who are discharged on the same grounds and whose total time of active duty is not less than 15 years continue to receive rank pay for 1 year after discharge.

5. The following additional job placement and social support rights are established for citizens discharged from active duty and for their families:

- placement in a job with regard for their specialty, not more than 1 month from the day of application to state employment organs, at state (municipal) enterprises or in state (municipal) institutions or organizations;
- retention, for a period of 3 months after discharge from active duty, by citizens who had worked at state (municipal) enterprises or in state (municipal) institutions or organizations prior to induction (entry) into military service, the right to be rehired by the same enterprises, institutions or organizations, and by inducted active duty servicemen and officers called up for 2 years of active duty from the reserves, also the right to a position that is not below that occupied prior to call-up into military service;
- inclusion of time of active duty in the total time of work defined by Article 10 of this Law and considered in the payment of assistance on the basis mandatory state social insurance, of the one-time bonus for years served and of the percent increase in wages, and in the granting of advantages, if the interval between the day of discharge from active duty and the day of hiring (admission to an educational institution) had not exceeded 1 year;

- the preferential right to retain a job to which they had been initially hired when a reduction of the work force occurs;
- the possibility for citizens discharged for health reasons or in connection with organizational and staffing measures to obtain a professional education free of charge;
- provision, to citizens who are discharged after serving active duty as inductees and who are accepted to their former place of work, of assistance for initial establishment of a household in accordance with policy established by the government of the Russian Federation;
- allotment, not later than a month's time from the moment of application by servicemen discharged from active duty, of places for their children in preschool educational institutions and summer health improvement camps, regardless of their departmental subordination.

When citizens who served active duty in regions of the Far North and in other locales with unfavorable climatic and ecological conditions, in which percent increases established by legislation are added to the wages of workers for continuous work at enterprises, institutions and organizations, accept a job in these regions and locales within 6 months from the day of discharge from active duty, the time of active duty in the indicated regions and locales is included in the continuous time of work used to determine advantages established by legislation.

6. In order to provide for job placement of citizens discharged from active duty, the state employment service establishes organizations for their job placement and professional training.

Article 23. Social Protection of Families of Servicemen That Have Lost Their Breadwinner

1. In the event that contracting active duty servicemen are killed or they die as a result of a disabling injury (wound, trauma, contusion) or disease acquired during active duty, including after discharge from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures, their families retain the right to the advantages they had enjoyed previously for not less than a year, unless foreseen otherwise by legislation.
2. Pension support is provided to the families of servicemen in the event that they lose their breadwinner in accordance with pension legislation of the Russian Federation.
3. The total income received by the families of contracting active duty servicemen who die as a result of accident, hostile action or natural causes is reduced for the tax reporting period by an amount of income not exceeding, for every complete month during which income was obtained, three times the minimum wage established by law.
4. The families of servicemen that have lost their breadwinner are released from paying the property tax of natural

persons and tax on transportation resources transferred to their possession by inheritance, and from paying land tax.

5. The families of servicemen that have lost their breadwinner cannot be moved out of housing space they occupy without being afforded other fully equipped housing space free of charge in the event of termination of labor relations with the corresponding enterprises, institutions or organizations. The families of servicemen retain advantages in payment for housing space, communal services, electric power, gas and use of a telephone which they possessed on the day of the death of servicemen due to accident, hostile action or natural causes regardless of the form of ownership of the housing space occupied, and they retain the right to improvement of housing conditions in accordance with legislation. The families of servicemen who died as a result of accident, hostile action or natural causes living in residential buildings without central heating are provided fuel on priority with a discount of 50 percent of its cost, within norms established for sale to the public at large.

The families of servicemen that have lost their breadwinner have the preferential right to obtain land parcels for construction of individual homes and to be accepted into gardening partnerships. They are granted the right to obtain reduced-rate loans for construction of individual homes and for construction and repair of garden sheds in accordance with policy determined by the government of the Russian Federation.

Bodies of local self-management overhaul individual homes belonging to families of servicemen that had lost their breadwinner with financing from the corresponding budget.

6. The parents and the unremarried wives (husbands) of servicemen who died as a result of accident, hostile action or natural causes during active duty are granted the right of free health care and the preferential right of admission to boarding houses for the elderly and disabled, as well as to territorial centers of social support to pensioners and departments of home social assistance.

The wives (husbands) of field-grade and flag officers who had died as a result of accident, hostile action or natural causes, including those discharged from active duty upon attaining the maximum age of active duty, for health reasons or in connection with organizational and staffing measures, retain advantages in health care and in sanatorium and health resort treatment.

Section III. Responsibilities of Servicemen

Article 24. General Responsibilities

Defense of the state sovereignty and territorial integrity of the Russian Federation, maintenance of state security, repulsion of armed invasion and fulfillment of missions in accordance with international obligations of the Russian Federation are the essence of military duty, which obligates servicemen:

—to be faithful to the military oath, to serve their people selflessly, and to defend their fatherland courageously and competently;

—to strictly observe the Constitution of the Russian Federation, laws of the Russian Federation and the requirements of general military regulations of the Armed Forces of the Russian Federation, and to unquestioningly fulfill orders of commanders (superiors);

—to value the honor and combat glory of our people's defenders, the honor of rank, and true comradeship;

—to improve military proficiency, to maintain armament and military equipment in constant readiness for use, and to care for military property;

—to be disciplined and vigilant, and to maintain state and military secrecy;

—to observe the rules of international law in the military area adopted by the Russian Federation.

Servicemen are considered to be performing the responsibilities of military service in cases foreseen by the Law of the Russian Federation "On the Military Obligation and Military Service."

Article 25. Official and Special Responsibilities

1. The official responsibilities of servicemen and the procedure of carrying them out are determined by legislative acts, military regulations and other normative documents.

2. Commanders (superiors) are one-man commanders, and they are responsible in peacetime and in wartime for constant combat and mobilizational readiness, for successful fulfillment of missions, for the combat training, education, military discipline and morale of subordinated personnel, the safety of military service, the condition and safeguarding of armament, military equipment and property, and for material, technical, medical, financial, social, legal and personal support.

3. Servicemen serving alert duty (combat duty) in daily and garrison details who are enlisted to aid in disaster recovery as well as in other extraordinary circumstances fulfill special responsibilities. The special responsibilities and the procedures of their fulfillment are established by legislation and the general military regulations of the Armed Forces of the Russian Federation.

To perform special responsibilities, servicemen may be provided additional rights (to use weapons and force, to make demands requiring mandatory execution, subordination to strictly determined persons, and others), which are determined by legislative acts and general military regulations of the Armed Forces of the Russian Federation.

Section IV. Liability of Servicemen

Article 26. Liability of Servicemen for Violations of the Law

1. Servicemen bear disciplinary, administrative, material, civil legal and criminal liability depending on the nature and severity of the violation.

2. For transgressions involving violation of military discipline, moral norms and military honor, servicemen bear

disciplinary liability on the basis of grounds and in accordance with policy determined by general military regulations of the Armed Forces of the Russian Federation.

3. Servicemen bear liability for administrative violations on universal grounds in accordance with legislation on administrative violations. In this case administrative punishments taking the form of a fine, forfeiture of driving privileges, corrective labor and administrative arrest may not be used against them.

4. In accordance with the Statute on Material Liability of Servicemen, servicemen are materially liable for material damages inflicted upon the state during performance of the responsibilities of military service.

5. Servicemen bear civil legal liability for failure to perform obligations foreseen by civil legislation or failure to perform them adequately, and for damages inflicted by servicemen due to failure to perform the responsibilities of military service upon the state, legal persons and citizens, and in other cases foreseen by legislation.

6. Servicemen bear criminal liability in accordance with legislation of the Russian Federation for crimes they commit.

Article 27. Court Proceedings in Relation to Servicemen

1. Court proceedings in criminal and civil cases involving servicemen are conducted on the basis of legislation of the Russian Federation, while proceedings in relation to servicemen serving active duty outside the Russian Federation are conducted in accordance with the rules of international law, unless established otherwise by international agreements of the Russian Federation.

2. Servicemen are provided the right to defense in accordance with policy established by the legislation of the Russian Federation.

[Signed] President of the Russian Federation B. Yeltsin
Moscow, Russian Palace of the Soviets
22 January 1993

Supsov Decree on Implementation

93UM0383B Moscow KRASNAYA ZVEZDA in Russian
4 Feb 92 p 1

[Decree of the Supreme Soviet of the Russian Federation "On the Procedure for Enacting the Law of the Russian Federation 'On the Status of Servicemen'"]

[Text] The Supreme Soviet of the Russian Federation resolves:

1. To enact the Law of the Russian Federation "On the Status of Servicemen" as of 1 January 1993.
2. That the government of the Russian Federation shall:
 - submit, to the Supreme Soviet of the Russian Federation within a month's time, proposals on bringing legislative acts of the Russian Federation in correspondence with the Law of the Russian Federation "On the Status of Servicemen";

- establish, within a month's time, policy by which servicemen and their families are to exercise their right of acquiring industrial goods, food products and the products of public food services at reduced rates through the trade network in accordance with Clause 4, Article 14 of the indicated Law, and submit proposals to the Supreme Soviet of the Russian Federation on tax exemptions for military trade enterprises and organizations;

- bring normative acts presently in effect in correspondence with the indicated Law and ensure their fulfillment;

- during formation of the budgets of national-state and administrative-territorial entities, work jointly with executive bodies of state government of subjects of the Russian Federation to allocate assets required by bodies of local self-management to provide housing space for citizens discharged from active duty and their families, for their temporary accommodation in housing space, for payment of monetary compensation for leasing (subletting) housing space, or transfer of assets for the construction or acquisition of housing to them.

That in the event that assets approved in budgets of national-state and administrative-territorial entities are insufficient for these purposes, the government of the Russian Federation shall compensate, out of the republic budget of the Russian Federation, outlays from the corresponding budgets for the indicated needs.

3. That officers, shore-based and seagoing warrant officers, extended-service servicemen and servicewomen performing active duty in private, seamen, NCO and petty officer positions shall be equal in their rights and advantages established by the indicated Law to contracting active duty servicemen until conclusion of the period of transition to the principle of manning the Armed Forces of the Russian Federation on a contract basis.

[Signed] Chairman of the Supreme Soviet of the Russian Federation R. I. Khasbulatov
Moscow, Russian Palace of the Soviets
22 January 1993

CIS: STRATEGIC DETERRENT FORCES

Strategic Missile Troops Recruitment Needs

Lt-Gen Panin Interview on RVSN Manning

93UM0453A Moscow KRASNAYA ZVEZDA in Russian
13 Mar 93 p 7

[Interview with RVSN [Strategic Missile Forces] Cadre Training and Assignment Directorate Chief Lieutenant-General Ilya Grigoryevich Panin by KRASNAYA ZVEZDA Correspondent Major Aleksandr Dolinin: "Replacement Troops Are Awaited at Missile Schools"]

[Text] According to the START-1 and START-2 treaties, a large number of missiles can be reduced in the RVSN [Strategic Missile Troops]. Aren't Missile Troops military school graduates threatened with "unemployment" as a result of that? How can young men from Russia carry out their dream of becoming officer-missileers? RVSN Cadre

Training and Assignment Directorate Chief Lieutenant-General Ilya Panin answers these and other questions.

[Panin] In either case, missile officer are not threatened with "unemployment". Training of officer cadres for the RVSN is being carried out in strict compliance with their needs based on a purposeful and long-term program. We have conducted the appropriate calculations while considering the development of the disposition of forces, including future arms reductions, as it was done on the eve of the realization of the INF Treaty (Incidentally, based upon the results of this work, all of our predictions and calculations have proven to be correct). At the present time, we not only do not have a single "excess" officer but, on the contrary,—we are experiencing an acute shortage of them, especially in leading positions. So, military school graduates of this year and subsequent years, including those whom we invite to enroll, can rest assured that a position will always be found for them in the RVSN. The elimination of missiles does not entail an identical reduction of people. The possibility has not been excluded that the need for them will also increase.

[Dolinin] How do you explain that?

[Panin] The fact is that the RVSN—are permanent combat readiness troops. Their primary activity is combat alert duty. In the process, the greatest load falls on officers. They experience significant physical, intellectual and psychological loads. We cannot consider a situation, when an officer has to be on alert duty for 15-18 days per month, like right now, to be normal. And the Missile Troops leadership is taking steps to increase alert duty shifts and crews and thereby ease the labor of an officer-missileer.

We also need to consider that we are shifting from missile systems armed with ICBM's with MIRV warheads to modernized mobile systems, the operation and maintenance of which require several times as many people.

Yes and experience has demonstrated that we need professionals for the very process of the elimination of missiles.

[Dolinin] Missile Troops' schools train engineers in 48 specialties. Are there any unique specialties among them?

[Panin] I want to stress: of all of the specialties that missile officers acquire, there is not a single one that would not find its application in various sectors of the national economy, science, and production. For example, mechanical engineers, electrical engineers, mathematical engineers, cybernetic engineers and radio engineers. There are also rare types of engineers—for example, ballistics and metrology [science of weights and measures].

[Dolinin] What are the prospects for growth for junior missile officers?

[Panin] Missile Troops VVUZ's [military higher educational institutions] provide a fundamental education and

high professionalism combined with a conscientious attitude toward assigned duties which permits practically every officer to grow in the service. Let me cite just one example. Missile School Graduate Vladimir Yakovlev, about whom KRASNAYA ZVEZDA has written, has passed through all of the primary positions from launch team engineer to division commander during his 16 years of service. At 37 years of age, he was awarded the first general's rank. There are quite a few such examples in the troops.

During the last five years, approximately 70% of the officers have been advanced to a higher position, 60% have been given state awards, and dozens of junior officers receive military ranks early.

[Dolinin] Besides a fundamental education, in what are Missile Troops schools strong?

[Panin] Each school has its "sparkle". For example, the unique school of the Patriarch of Russian Combat Art Aleksey Kadochnikov has existed for many years at the Krasnoyarsk school. There are fine traditions at the Rostov and Stavropol schools...

I will also say that we annually spend millions on the training of each cadet. Missileers' diplomas carry great weight. Our missile educational institutions opened the road to space for Pilot-Cosmonaut Yuriy Artyukhin and for certain other of his colleagues.

[Dolinin] Ilya Grigoryevich, we all know that missileers perform their service far from large cities. Will that attract young people?

[Panin] Many division-sized and smaller units are also deployed in major administrative centers—Kostroma, Orenburg, Yoshkar-Ola... But other locations also have their charms of life and the conditions there are at times even better.

It seems to us that the RVSN has the most favorable conditions for providing social guarantees to servicemen and their families. We have enough urgent issues but hope for their resolution has appeared right now. Today, there is not a single missile garrison where each year a foundation would not be laid for a new apartment building, school or kindergarten.

[Dolinin] Do you think that the person who selects missileer duty will not regret it?

[Panin] It is impossible to reduce it to just a lifestyle. Having just become a missileer, one can understand its romantic appeal and can sense the trust that has been placed in them. They entrust these weapons to each one.

I myself at one time arrived at Serpukhov School from out-of-the-way Belgorod. And there were both questions and doubts. Today I am proud of the fact that I serve in the RVSN.

Recruitment for RVSN Training Announced

93UM0453B Moscow KRASNAYA ZVEZDA in Russian
13 Mar 93 p 7

[Unattributed article: "RVSN Military Educational Institutions Invite"]

[Text]

**Military-Educational Institutions—Specialty, Skill
(Period of Study)**

**Military Academy imeni F.E. Dzerzhinskiy, K-74, Moscow
103074, Telephone 2983909**

- Systems engineer researcher (6 years)
- Ballistics engineer (5 years)
- The Academy trains military engineers in especially complex and scientific-intensive specialties:
 - mathematics and engineering physics arms research methods;
 - experimental work on arms complexes and their systems;
 - mathematical programming and technical support of the functioning of special computer complexes and others.

**Higher Military Command-Engineering Schools (5 Year
Period of Study)**

1. Rostov VVKIU RV [Missile Troops Higher Military Command-Engineering School], 27, Rostov-na-Don 344027

- Radio electronics engineer
- Mechanical engineer
- Radio engineer
- Cybernetics engineer
- Engineer-mathematician
- Electrical equipment engineer
- Engineer-metrologist [science of weights and measures]

2. Serpukhov VVKIU RV, Moscow Oblast, Serpukhov-2 142202

- Mechanical engineer
- Electrical engineer
- Electromechanical engineer
- Electrical equipment engineer
- Cybernetics engineer
- Radio electronics engineer

3. Perm VVKIU RV, 15, Perm, 614015

- Mechanical engineer
- Cybernetics engineer
- Electromechanical engineer

4. Krasnodar VVKIU RV, 90, Krasnodar 350090

- Cybernetics engineer
- Power Engineer

Stavropol Higher Military Engineering Signals School

Stavropol VVIUS, 28, Stavropol, 355028

- Radio electronics engineer
- Telecommunications engineer
- Electrical equipment engineer
- Radio engineer

CIS: GROUND TROOPS

**BREM-K Armored Repair and Evacuation Vehicle
Described**

93UM0415B Moscow KRASNAYA ZVEZDA in Russian
26 Feb 93 p 2

[Article by KRASNAYA ZVEZDA Correspondent Major Aleksandr Yegorov, under the rubric: "Arsenal": "The BREM Rushes to Assist"]

[Text] At the end of January, the Russian Federation Ministry of Defense accepted a vehicle into the inventory that has been long awaited in the troops—the BREM-K wheeled, armored, repair and evacuation vehicle. So, the experimental design work, that was conducted for eight years at the GAZ PO [Production Association] Motor Vehicle Plant (currently—the GAZ Joint-Stock Company) by the collective of Chief Designer Aleksandr Masyagin, has been completed.

The BREM-K is the first swallow in an entire family of technical maintenance vehicles on the so-called combat base, to the development of which, let's put it frankly, inadequate attention was devoted in our Armed Forces. As a result, until today, wheeled BTR's [armored transport vehicles] did not have an assistant, either on the battlefield or on the march. BMP's [armored personnel vehicles], tanks, and motor vehicle prime movers towed them out from under fire. Urgent repair under field conditions was a problem in general, the solution of which, as a rule, depended on a soldier's native intelligence and his muscles.

Everything is in place with the BREM-K's arrival. Wheeled armored transport vehicles will henceforth be serviced by the repair and evacuation vehicles on that same armored transport vehicle base "that knows how" to do practically everything: weld and cut metal; tow not simple stuck BTR's but also BTR's that are literally mired up to the turret and also BTR's that have sunk; tow operable and inoperable BTR's out from under enemy fire and from routes of march while afloat or on dry land; conduct vehicle surveillance of the battlefield during the day and at night; assemble and disassemble equipment (including the turret with weaponry and the power plant); and, transport spare parts and materials weighing up to 500 kg in the cargo rack.

Test operation of the BREM-K that was conducted at a unit in the Moscow suburbs provides the grounds to suggest that this vehicle will actually become a good assistant to the company-level soldier and officer.

The Main Armor Directorate reported that the Ministry of Defense plans an order for the first shipment of BREM-K's which may already arrive in the troops this year.

Primary Specifications of the Armored Repair and Evacuation Vehicle (BREM-K)

Weight, in tonnes	14.5
Crew, in men	4
Cargo Capacity of the Platform, in kilograms	500
Maximum Speed, in kilometers per hour	
—On a Paved Road	90
—Afloat	10
Range on a paved road, in km	600-800
Engine	KamAZ-7493 Diesel
Weaponry	
—Machinegun	7.62 mm PKT [Kalashnikov Tank Machinegun]
Communications Systems	
—UHF Transceiver	R-173M
—UHF Receiver	R-173P
—Portable UHF Transceivers, number	R-162-01, two
Repair-Evacuation Equipment	
Fixed Vehicle Crane, arm installed on the hull's nose	
Cargo Capacity, in tonnes	1.5
Manual Crane, Movable, Arm Installed on the Turret	
Cargo Capacity, in tonnes	0.8
Electric Welding Generator	GD-400ZU2
Towing Winch	
Maximum Towing Force, in kgs	4,400-6,000
Using a Block and Tackle	15,000
Trail Spade-Support To Secure the Vehicle to Terrain While Towing Out Stuck Vehicles, Towing Cable Set, in meters	160 (75+75+5+5)
A Towing-Coupling Device Set to Tow Inoperable Vehicles	

CIS: AIR, AIR DEFENSE FORCES

Maj-Gen Avn Alekseyev on New Air Forces Safety Service

93UM0364A Moscow KRASNAYA ZVEZDA in Russian
13 Jan 93 p 2

[Interview with Flight Safety Service (SBP) Major-General of Aviation Aleksey Ivanovich Alekseyev by Colonel

Aleksandr Andryushkov under the rubric "Topical Theme": "The Formula for Reliability: Man—Aircraft—Environment"]

[Text] *The Flight Safety Service (SBP) has been created in the Air Forces of Russia. We publish here an interview with its chief, Major-General of Aviation Aleksey Alekseyev.*

[A. Andryushkov] Aleksey Ivanovich, 1992 was undoubtedly a difficult year both for Russia and for its armed forces. The more so as some of the mass media are trying to thrust onto society an opinion of the army as a structure that is conducting business that is not characteristic of it today. So let's clear up just what the Air Forces of Russia have been engaged in over the last year.

[A.I. Alekseyev] First on the mass media. Military fliers have always been grateful to the press for any sign of attention to their difficult cause and fate. But we are against looking for "fried facts" in our aviation misfortunes and confusing the public.

Military fliers have been going about their business in a difficult political and economic climate. All of the branches of aviation have been conducting their planned combat-training work, mastering new aviation hardware and conducting exercises with redeployments to new bases and firing at practice ranges. A launch of missiles from the most modern strategic bomber, the Tu-160, was performed successfully for the first time this year.

We have also had to solve new problems that no one aside from the fliers has been able to resolve. That includes rendering assistance to people who have been stricken at the "hot spots" of the former Union. The military pilots were welcomed at all airfields abroad, both near and far. They were going day and night, deflecting the misfortune from the civilian population. Unfortunately, not always sparing themselves.

[A. Andryushkov] The Collegium of the Ministry of Defense of Russia was recently considering the question of the state of affairs in military aviation. The decision was made to prepare and submit to the government a package of documents aimed at raising the safety of flight operations. If it is not a secret, what is the overall picture of the accident rate in the Air Forces? What brought about the creation of the Air Forces SBP?

[A.I. Alekseyev] Despite an overall reduction in the number of flight accidents, the number of crashes—and, most importantly, the severity of their consequences—increased somewhat in 1992. More than 60 people were killed, after all, in two crashes of An-12 and An-22 aircraft alone.

But while being profoundly affected by the loss of people, the overall situation should not be dramatized, and it should not be laid on too thick. An analysis of the accident rate over a prolonged period shows that even in the most favorable years for the country, the state of safety was only a little bit better.

There is something else that gives pause. The number of flight accidents that were the fault of personnel has

exceeded 60 percent for decades—that is, the person has become the steady source of flight misfortunes. Measures to increase reliability, however, are still not effective enough.

There was a famous decree on measures to combat flight accidents that was adopted in 1965. The fliers are still waiting for the fulfillment of its requirements, like many other documents pertaining to concerns for improving social, housing and domestic conditions. Since that time (more than 27 years!) the government has not touched at all on the problem of increasing flight safety. The military fliers have been given complete independence in solving this state problem, and are not backed up with finances or material support.

The causes of the tragedies in the air are entirely on the ground. Most grave flight accidents are connected with serious shortcomings in the organization of flights and the personal lack of discipline of the flight crews, as expressed in gross violations of the rules and regulations of flight operations.

The alarming situation with the accident rate in the Air Forces is more than just a consequence of our omissions in preventive work; it also requires the resolution of a whole series of problems associated with "flying" in general. The lack of kerosene, modern simulators, well-equipped airfields with amenities at airfield garrisons and the poor pay are leading to fact that the once prestigious and romantic service of aviation is becoming burdensome. The ways of solving these problems should be reflected in a state program to ensure flight safety—which unfortunately does not yet exist.

As for the Air Forces Flight Safety Service, it is not a novelty in the period of the current reformation of the armed forces of Russia. The problem of safety in the Air Forces prior to the end of 1991 was being solved by a respectable SBP, with a staff of 60 people. But the desire to gain independence touched on it as well. The SBP went out from under the subordination of the Air Forces high command and automatically freed itself from the largest amount of work, while the tasks being performed by that large apparatus were entrusted to the new Air Forces Flight Safety Service of ten people. You will agree that it is not the number of functionaries that determines the ultimate results, but when it is not satisfactory, the causes are sought everywhere, including in the structure.

I will be frank. The existing structure of the bodies for flight safety in the Air Forces has still not had the impact that we were counting on when they were created. The reason for that, in my opinion, is their intolerably small numbers and the separation of the SBP specialists from the units. Imagine—there are more than twenty air units and subunits in the capital-area military district of the Air Forces, and just two SBP specialists. The situation in the other aviation formations is the same.

I thus feel that the SBP specialists should be in the places where safety is forged and ensured—that is, in the squadrons and regiments. They should be the primary, reliable professional brake on accidents, even at the expense of the

higher structures. I am not a naive person, and I know that the introduction of any position entails serious difficulties. But I am confident that the gains from a regular staff SBP specialist in the regiment would be greater than dozens of them in the "higher echelons."

[A. Andryushkov] The service has nonetheless been created and the tasks assigned, and they must be fulfilled. What, in your opinion, should be definitive in the fight for flight safety?

[A.I. Alekseyev] The fulfillment of the decree of the Collegium of the Ministry of Defense of the Russian Federation of 2 Nov 92 lies at the heart of our plans.

The long run is clear—an increase in the safety of flights is achieved by raising the reliability of each component of the "man—aircraft—environment" aviation system. Not everything in that system is in harmony today. It has moreover become skewed. We are armed with fourth-generation aircraft. They are saturated with electronics, and their vitally important systems have redundancy many times over. Industry is constantly refining aviation hardware. The objective monitoring of its functionality has been improved. All of this is being done in order to increase the reliability of the aircraft. The person is a more complicated matter. He has almost not changed. The system of training him for flights or monitoring readiness has also not changed. His support has become even worse.

I feel that if we acknowledge as fact that the person is the principal culprit in accidents, everything should be done to increase his reliability on the ground and in the sky. Responsibility for meeting the needs and requirements of the person still lies on the military fliers themselves.

[A. Andryushkov] Aleksey Ivanovich, isn't it obvious that the time has come to understand that the pilot is not just an object on the receiving end for criticism and sanctions by a host of offices, but rather the main individual in ensuring the safety of flights, and that all the other services should be working for him?

[A.I. Alekseyev] I would clarify that every pilot should not be at the receiving end of criticism, but that all should be working for each. That is the specific nature of our work.

The minister of defense of Russia said in one of his speeches that a pilot should fly, otherwise he is no pilot. That corresponds to the chief principle of aviation, "The more you fly, the better you fly"—that is, without accidents. But the economy has struck a sharper blow against flight safety today than ever before. Cutbacks in flying time and reductions in professional training have become a harsh reality. We have still not entirely felt the negative effects of the economic tensions in the country. We are still being saved by reserves of combat proficiency, flight experience and matériel. But they will not last for long, as they are being expended faster than they are being replenished.

[A. Andryushkov] And how does military science look at these problems?

[A.I. Alekseyev] In mastering my position and becoming familiar with the system for ensuring flight safety, I learned with some surprise how many institutions, organizations and services there are that are constantly thinking about safety and working for the sake of it, and I was angry to realize that the pilot gets nothing from them, that is, solid ties are lacking between science and aviation practice. The impression is created that the scientific research dedicated to the problems of flight safety is worked out, paid for and left in safes. There is no monitoring or exactingness toward its realization.

I do not know what that is connected with—economic accountability or agency parochial fragmentation—but I am sure that if our cumulative scientific potential is directed toward the pilot, the navigator and the hardware with the aim of enriching and increasing their knowledge and making that work more active, then we would have created a solid bulwark against accidents.

[A. Andryushkov] The person is the principal figure in the fight for flight safety. But does everything depend only on the military fliers?

[A.I. Alekseyev] Of course not everything. Flight safety in the military aviation of Russia, first of all, is not a departmental problem. The coordinated actions of all who order, design, create and operate aviation hardware are needed for its resolution. And if the performance of flights without accidents is defined as a task of state importance for us, then the government should take upon itself the pursuit of measures on a nationwide scale for their solid support.

Second, life has given military fliers the opportunity more than once of proving their loyalty to the oath and devotion to the people. The state can be proud of its winged protectors. I would like the pilots to be proud of it as well. That would formulate a good psychological mindset for flights. And mindset is a category of safety.

I would say, in summing up our discussion, that Russia has wings. But if it needs sturdy wings, it should be concerned with their reliability.

Specifications of MiG-21 Variants Still in Use

93UM0370A Moscow KRASNAYA ZVEZDA in Russian
19 Jan 93 p 2

[Article by aircraft designer Lev Bolshakov and Aleksandr Andryushkov and Sergey Federov of KRASNAYA ZVEZDA: "The MiG-21—A Long-Lived Aircraft"]

[Text] Aircraft are like people—each has its own fate. The MiG-21, created by the OKB [Experimental Design Bureau] imeni A.I. Mikoyan, was born under a lucky star. It is the longest-lived fighter in the world. MiG-21 series aircraft have been in the combat ranks, protecting the skies of the Fatherland, for more than thirty years.

The testing of the pre-series prototype—the Ye-6 aircraft with a turbojet engine developed by the OKB of A. Mikulin—started back in 1958. The new fighter had many specific features. A delta-wing shape was developed, and a system of semi-automatic control based on a dual-channel

automated system using hydraulic boosters was created. The OKB developed and adopted a new system for saving the pilot in an emergency, along with an open-nose air intake with a sharp edge and a movable central body (cone). The antenna for the airborne radar was housed in the nose cone. Test pilots G. Sadov, V. Nefedov, G. Mosolev and K. Kokkinaki gave the experimental prototypes of the MiG-21 the clearance to go up.

The electrical control system was removed from the MiG, an emergency hydraulic pump was installed to maintain pressure in the system when the engine stopped and the air intake was adjusted according to the Mach level and angle of attack. The creation of the MiG-21U combat trainer facilitated the successful assimilation of the aircraft in the line units.

The pilots loved this light, multirole close-support fighter for its reliability, high maneuverability and firepower. The MiG-21 executes advanced aerobatic maneuvers like a sport aircraft, and strikes airborne and ground targets effectively. The navigational equipment of the aircraft allows it to operate in day or night and under any weather conditions. The MiG-21 is distinguished by unpretentiousness, and serves without breaking down in any climate. Its technical maintenance brings no cares to the specialists on the ground. The MiG-21 has earned the lofty title of soldier-aircraft. World aviation has not yet seen a more steadfast aircraft. The MiG-21 has 15 basic versions and more than 30 experimental modifications. The best known of those are the ones with the suffixes F, P, PF, US (dual trainer) and BIS.

The years passed. The conceptual framework of aerial battle changed; the informational capabilities of the radar sighting systems (RLPK) and navigational systems, along with the tactical performance characteristics of missile weaponry and the "intellectual capabilities" of the aircraft in supporting the processing of information and the use of weaponry, gained decisive significance together with the tactical performance characteristics (LTKh) of the aircraft.

The latest modification worked out at the OKB, named the MiG-21I, has demonstrated the possibility of an increase of many times over in the combat effectiveness of the MiG-21BIS without changes in the airframe or power plant, through its retrofitting with modern electronics equipment and air-to-air missiles.

The Kopye multifunctional, congruent pulse-Doppler RLPK with an on-board computer and a new target-designation system, developed by the Russian firm of Fazotron, provides for the detection and attacking of airborne targets at any target aspect and in the forward or rear hemispheres, including against the ground, in good and bad weather conditions and in the presence of natural or intentional jamming. The RLPK allows the pilot to maintain radar scan of the airspace with the automatic tracking of up to eight targets, which reduces the possibility of a surprise attack on the part of an enemy.

The fitting of the MiG-21I with the R-26K1 and R-27T1 all-aspect medium-range missiles, which have radar and

thermal homing heads, markedly expands the range of altitudes and speeds of the targets that can be intercepted.

The K-73E all-aspect close-range air-combat missile, with a thermal homing head, is able to strike targets maneuvering at up to 12 Gs.

The realization of the mapping mode in the RLPK will allow the MiG-21I to be used for reconnaissance, terrain orientation and identification of major radar-contrasting targets, for their subsequent visual detection and the delivery of weapons.

The installation of jamming units [BVP] against enemy radars and missiles substantially increases the survivability of the MiG-21I in operations against airborne and ground targets.

The equipment and armaments being installed on the MiG-21I were by and large developed for the MiG-29 aircraft, and the upgrading can thus be completed in a relatively short period of time—over 2—3 years.

It is too early for the MiG-21 soldier-aircraft to go into the reserves, and more long years of service, judging from everything, lie ahead.

Principal Tactical-Performance Data of the MiG-21 Fighter

	MiG-21BIS	MiG-21I
crew	1	1
normal takeoff mass, kg	8,725	8,825
engine, type	R24-300	R24-300
captive thrust, kg	7,100	7,100
maximum speed at ground/at altitude, km/hr	1,300/2,175	1,300/2,175
operational G-forces	8.5	8.5
effective ceiling, meters	17,300	17,300
flight range with bomb load w/o external tanks, km	1,210	1,210
RLPK detection range (target—MiG-21), km	18	45
number of targets tracked/fired on simultaneously	1/1	8/2
armaments (quantity and type)	—	1 x K27 (R1, T1)
short-range missiles	4 x R-13 (R, M)	—
close-range missiles	—	4 x R-73E
	6 x R-60 (M)	6 x R-60M
cannon, type/ammo load	GSh-23/250	GSh-23/250
non-guided rockets	64—96 x S-5	64—96 x S-5
bombs	4 x S-24	4 x S-24
	8 x 100 kg	8 x 100 kg
	4 x 250 kg	4 x 250 kg
	2 x 500 kg	2 x 500 kg
jamming units	—	2 x BVP-30-26 with 29SP system
altitude of intercepted targets, km	1—20	0.03—22

Air Force Recruitment, Training Openings, Awards Announced**Training for Pilots, Engineers, Other Specialties**

93UM0449A Moscow KRASNAYA ZVEZDA in Russian 27 Feb 93 p 7

[Announcement of school openings: "Air Force Military Educational Institutions Invite You"]

[Text]

Military Educational Institutions

Institution	Specialty, Skill
Red Banner Military Aviation Engineering Academy imeni Professor N.Ye. Zhukovskiy, Orders of Lenin and October Revolution, 125167, Moscow-167, Lengradskiy Prospekt, 40.	Aircraft and power plants. Engineer-mechanic-researcher. Aircraft armament. Engineer-electrical mechanic-researcher. Aviation equipment. Engineer-electrician-researcher. Automated control systems. Electronic equipment engineer-researcher. Avionics. Electronics engineer-researcher.

Flight Schools

1. Balashov Higher Military Aviation School for Pilots imeni Chief Marshal of Aviation A.A. Novikov, 412340, Balashov-3, Saratov Oblast.	Military Transport Aviation pilot. Pilot-engineer.
2. Barnaul Higher Military Aviation School for Pilots imeni Chief Marshal of Aviation K.A. Vershinin, 656018, Barnaul-18, Altay Kray.	Fighter-bomber aviation pilot. Pilot-engineer.
3. Kacha Higher Military Aviation School for Pilots imeni A.F. Myasnikov, 400010, Volgograd-10.	Fighter aviation pilot. Pilot-engineer.
4. Tambov Higher Military Aviation School for Pilots imeni M.M. Raskovoy, 392004, Tambov-4.	Bomber aviation pilot. Pilot-engineer.

Navigator Schools

1. Chelyabinsk Red-Banner Higher Military Aviation School for Navigators imeni 50th Anniversary of All-Union Komsomol, 450015, Chelyabinsk-15.	Navigator (for all services and branches of aviation). Navigator-engineer.
2. Yeysk Higher Military Aviation School for Pilots imeni Twice Hero of the Soviet Union USSR Pilot-Cosmonaut V.M. Komarov, 353660, Yeysk-7, Krasnodar Kray.	Air traffic control officer. Air traffic control engineer.

Engineering Schools

1. Voronezh Higher Military Aviation Engineering School, 394064, Voronezh, 64.	Motor vehicle equipment. Engineer for maintaining special motor vehicles. Aviation logistic support. Engineer for maintaining airfield equipment. Airfield equipment. Engineer-electrician. Power systems of buildings. Engineer-electrician. Meteorology. Engineer-meteorologist.
2. Order of the Red Star Irkutsk Higher Military Aviation Engineering School imeni 50th Anniversary of the All-Union Komsomol, 664036, Irkutsk-36.	Aircraft and power plants. Engineer-mechanic. Aircraft armament. Engineer-electrician. Aviation equipment. Engineer-electrician. Avionics. Radio engineer.
3. Tambov Order of Lenin Red-Banner Higher Military Aviation Engineering School imeni F.E. Dzerzhinskiy, 392006, Tambov-6.	Aviation radio equipment. Radio engineer. Automated control systems. Electronic equipment engineer. Aircraft armament. Engineer-electrician.

Aviation Technical Schools

1. Achinsk Military Aviation Technical School imeni 60th Anniversary of the All-Union Komsomol, 662100, Achinsk-1, Krasnodar Kray.	Aircraft and aircraft engines. Technician-mechanic. Aircraft armament. Technician-electrician. Aviation equipment. Technician electrician.
2. Kirov Military Aviation Technical School, 610041, Kirov-41.	Electronic equipment. Radio technician. Helicopters and aircraft engines. Technician-mechanic.
3. Krasnodar Military Combined Flight Technical School imeni Hero of the Soviet Union A.K. Serov, 350005, Krasnodar-5.	Aircraft and aircraft engines. Technician-mechanic. Aircraft armament. Technician-electrician. Aviation equipment. Technician-electrician. Radio equipment. Radio technician.
4. Kurgan Military Aviation Technical School, 640016, Kurgan-16.	Aircraft and aircraft engines. Technician-mechanic. Electronic equipment. Radio technician.
5. Perm Military Aviation Technical School imeni Leninist Komsomol, 614049, Perm-49.	Aircraft and aircraft engines. Technician-mechanic. Aircraft armament. Technician-electrician. Aviation equipment. Technician-electrician. Electronic equipment. Radio technician.

Cadres, Training Chief on Openings, Eligibility

93UM0449B Moscow KRASNAYA ZVEZDA in Russian
27 Feb 93 p 7

[Interview with Colonel Leonid Nikolayevich Pakhnin, deputy chief of the Air Force Cadres Training and Assignment Directorate, by Andrey Mikhaylov, KRASNAYA ZVEZDA correspondent; place and date not given: "For Those Who Choose To Fly"]

[Text] Colonel L. Pakhnin, sector chief and deputy chief of the Air Force Cadres Training and Assignment Directorate, answers questions from our correspondent.

[Mikhaylov] Leonid Nikolayevich, as is apparent from the list of Air Force military educational institutions, the choice for applicants is fairly diverse. At what age can a person enroll in a school?

[Pakhnin] For compulsory-service personnel and soldiers and sailors, noncommissioned officers and petty officers discharged into the reserve with a service obligation, the maximum age is 23. Civilians are admitted into the schools between the ages of 17 and 21. It should be remembered: the person must turn 17, 21, or 23 in the year of admission.

[Mikhaylov] How are servicemen to complete the documents for admission into a school?

[Pakhnin] They submit an application through channels to the unit commander prior to 1 April of the year of admission. The commander of the formation [soyedineniye] makes the final decision to send compulsory- or extended-service personnel and warrant officers for consideration by preliminary selection boards or to reject sending them to training.

Compulsory-service personnel selected as candidates for admission to schools are sent to training courses. They are held from 5 through 30 June. The courses conclude with the selection process. Those not selected are sent back to their units. Warrant officers and extended-service personnel are sent to the schools to go through the selection process, with the date of arrival no later than 5 July of the year of admission.

[Mikhaylov] What documents are required of civilian youths wishing to enroll in Air Force schools?

[Pakhnin] Young men submit applications to the rayon (city) military commissariat for their place of residence no later than 1 May of the year of entry into training. The application indicates the full name, date of birth, current address, and the name of the military educational institution in which the applicant wishes to attend.

The decision on whether or not a young man is sent is made by the rayon (city) draft board based on a comprehensive study of the candidate.

Medical documents are completed according to the prescribed format for candidates selected and considered fit for training based on the condition of their health. Young men entering schools for pilots and navigators undergo another special medical certification at the oblast (kray) military commissariats.

If for some reason the military commissariats refuse to process the documents for the selected school, young men have the right to apply directly to the board of admissions of the school they have chosen to the chief of the school.

The candidate is notified where and when he is to arrive to go through the selection process by the chiefs of the schools through the military commissariats prior to 30 June. Those who have applied directly to the military educational institution are notified at their home address.

[Mikhaylov] How is the selection process conducted?

[Pakhnin] Above all, it involves entrance examinations. At flying, navigation, and engineering schools the examinations are on mathematics (written), physics (oral), and Russian language and literature (exposition and dictation). At aviation technical schools they check knowledge of mathematics (written) and Russian language and literature (exposition and dictation). Those enrolling in the Military Air Engineering Academy imeni Professor N.Ye. Zhukovskiy take tests on mathematics (written and oral), physics (written), and Russian language and literature (written).

[Mikhaylov] Leonid Nikolayevich, what other tests await applicants of military aviation schools?

[Pakhnin] Each of them will be tested and evaluated on physical training: pull-ups (7-11 times), a 100-meter dash (13.6-14.8 seconds), a 3-km cross-country run (12:00-13:30 min/sec), and swimming (100-50 meters). The numbers given in parentheses are the standards for "excellent" and "satisfactory" for candidates from among civilian youths.

Considerable importance is given to the candidate's social activeness and moral qualities. In evaluating these qualities, consideration is given to understanding the constitutional duty to defend the fatherland; demonstrating a sense of duty, principles, efficiency, industriousness, and honesty; participation in the social life of the collective; results achieved in duty (labor) activities and training; and the validity of reasons for wishing to become an officer in the chosen specialty.

The psychological examination is a distinctive barrier for some young people when enrolling in a military school, particularly one for training pilots and navigators. Certainly, a sound and thorough knowledge of subjects being studied at school is necessary to master any profession. But quite specific psychological qualities are necessary for a military pilot and navigator...

[Mikhaylov] What is the procedure for taking the examinations at the schools?

[Pakhnin] The testing of general educational training is virtually the same as in any higher or secondary civilian educational institution. Examination groups of 25-30 people are formed. As a rule, the interval between examinations is three days. The examinations are given by subject sub-boards by cards or quotas. Written tests are conducted in streams of 2-6 single-specialty groups.

The admissions board makes a general conclusion about the advisability of admitting a candidate into the school on a comprehensive basis according to all indicators of the selection process.

[Mikhaylov] Who gets preferential treatment in admission to military aviation schools?

[Pakhnin] We do not test the knowledge of general educational subjects for the following who are applying to military aviation technical schools: graduates of Suворov military and Nakhimov naval schools; graduates of special boarding schools with initial flight training; or graduates of special educational institutions or secondary vocational-technical schools who graduate with honors.

Young people who have completed the first and subsequent courses at civilian higher educational institutions also fit into this category of candidates. They may be admitted only to the first course after an appropriate personal interview. In doing so, the specialty which the candidate studied at the civilian institution must correspond to the officer training specialty at the school. If it does not correspond, the candidates have to take the examinations on a general basis.

As in civilian higher educational institutions, graduates of secondary schools who have been awarded gold or silver medals, or pupils of secondary special educational institutions or secondary vocational-technical schools who graduate with honors take an examination for military schools. It is determined by the chairman of the board of admissions. If they receive an excellent grade, they are exempt from taking the other examinations; if they receive a grade of "good" or "satisfactory," they take examinations on all the rest of the subjects.

During the period of conducting the selection process, all candidates reside in dormitories or barracks and are provided the same free food rations as for compulsory-service personnel.

[Mikhaylov] How long is the training period?

[Pakhnin] It is six years at the Military Air Engineering Academy; five years at the flight, navigation, and engineering schools; and three years at aviation technical schools. During the period of instruction, the officer candidates are provided all types of allowances (pay, clothing, food). Each year they are granted a 30-day leave and a two-week vacation.

School graduates are awarded the rank of "lieutenant" and given a state diploma awarding the corresponding qualification.

President's Edict on Awards to Air Force Officers
93UM0449C Moscow KRASNAYA ZVEZDA in Russian
27 Feb 93 p 2

[Unattributed article: "Honorary Titles to Military Pilots"]

[Text] By Edict of the President of the Russian Federation, honorary titles are awarded to the following people for

meritorious service, high indices in educating and training flight personnel, and many years of accident-free flying in military aviation:

"Honored Military Pilot of the Russian Federation"

Colonel Yevgeniy Borisovich Abramov,
Lieutenant-General of Aviation Nikolay Timofeyevich Antoshkin,
Lieutenant-General of Aviation Anatoliy Ivanovich Basov,
Colonel Vladimir Pavlovich Basov,
Colonel Yuriy Aleksandrovich Gafitulin,
Colonel Pavel Vasilyevich Gerasimov,
Colonel Aleksandr Pavlovich Gruzdev,
Colonel Vladimir Nikolayevich Gurkin,
Colonel Yuriy Galiyevich Dzhamgayev,
Colonel Nikolay Ivanovich Dumyushkin,
Colonel Petr Konstantinovich Yevseyev,
Colonel Anatoliy Semenovich Yeremeyev,
Colonel Nikolay Fedorovich Yermakov,
Colonel-General of Aviation Vyacheslav Vasilyevich Yefanov,
Colonel-General of Aviation Yevgeniy Pavlovich Zarudnev,
Colonel Gennadiy Vladimirovich Zakharov,
Colonel Martin Karoyevich Karapetyan,
Major-General of Aviation Vasily Dmitriyevich Klyuchenko,
Colonel Mikhail Vasilyevich Kovalev,
Major-General of Aviation Aleksandr Sergeyevich Kopytov,
Colonel Anatoliy Yevgenyevich Korovin,
Colonel-General of Aviation Boris Fedorovich Korolkov,
Lieutenant-General of Aviation Viktor Sevastyanovich Kot,
Colonel Aleksandr Ivanovich Lisovskiy,
Colonel Nikolay Grigoyevich Makatov,
Colonel-General of Aviation Anatoliy Ivanovich Malyukov,
Colonel Aleksey Stepanovich Markin,
Colonel Gennadiy Konstantinovich Miloserdin,
Colonel Anatoliy Nikolayevich Mishechek,
Colonel Boris Kalustovich Nazarov,
Lieutenant Colonel Boris Vasilyevich Permizhov,
Colonel Valeriy Nikolayevich Rozit,
Major-General of Aviation Viktor Filippovich Ruban,

Major-General of Aviation Vladimir Anisimovich Stepanov,

Colonel Igor Valeryanovich Torikov,

Colonel Aleksandr Anatolyevich Ulyanov,

Colonel Viktor Nikolayevich Fisun,

Colonel-General of Aviation Vladimir Gennadyevich Shkanakin.

"Honored Military Navigator of the Russian Federation"

Colonel Aleksandr Vladimirovich Balakin,

Colonel Sergey Ivanovich Gudoshnikov,

Colonel Viktor Dmitriyevich Chaynikov.

CIS: NAVAL FORCES

Modern Concepts of Electronic Warfare

93UM0418D Moscow *MORSKOY SBORNIK* in Russian No 1, Jan 93 (signed to press 21 Jan 93) pp 66-69

[Article by Senior Lieutenant A. Longinov]

[Text] The ever growing role of electronic warfare [radioelektronnaya borba] in naval combat operations of late led to where it acquired the status of a specific form of combat—electronic warfare [radioelektronnaya voyna]. This term is understood to mean the sum total of measures (or special operations by forces) mutually tied in by goal, place and time aimed at reducing the effectiveness of enemy use of electronic equipment for command and control of forces and weapons and protecting friendly equipment against similar measures on the enemy's part.

Electronic warfare (EW) includes three basic components:

- electronic support measures (ESM);
- electronic countermeasures (ECM);
- electronic countercountermeasures (ECCM).

ESM implies conduct of measures of signal intelligence [SIGINT], acoustic intelligence [ACINT] and partially optoelectronic intelligence by search, intercept, position-determination and identification of emission sources for an immediate reaction to the combat situation taking shape (basically for countering enemy missile attacks using fire-delivery weapons and EW). ECM as a whole is identical in content to our own analogue. ECCM includes measures for operational-tactical electronic maskirovka [lit. "camouflage", however, includes "concealment" and "deception"—FBIS], countermeasures to enemy technical intelligence, technical monitoring of emissions of friendly electronics and installations, and also protecting electronics against jamming.

Such a division of EW [Translator note: "EW" is used from here on for both electronic warfare and electronic warfare, as the author does not seem to make any further distinction between them] into those components generally is arbitrary, being the base of practical EW measures common to all branches of the Armed Forces. But with consideration of the specific nature of combat operations, each branch of the Armed Forces comes up with its own

EW concepts as well as a technical policy for developing and building its equipment and systems.

An analysis of the course of combat operations in local wars and armed conflicts in the Near East, Falkland Islands, Libya and the Persian Gulf, where basic methods of modern EW by full-scale naval force groupings and small tactical ship elements were demonstrated and evaluated, shows that combat stability of forces at sea and the effectiveness of their weapon employment depends largely on the level of development of EW equipment and forms and methods of its use. Conduct of EW by ship elements reduces on the whole to accomplishing three interrelated sets of measures, which include the following: determining the electromagnetic environment and giving over-the-horizon [OTH] target designation to attack weapons; operational-tactical maskirovka; and defense against antiship weapons.

Let us examine those sets of measures in greater detail. Processes of determining and tracking the electromagnetic environment, which is part of the overall situation, and accomplishment of OTH target designation are inseparable from each other in performing primary missions assigned to ship forces at sea. Foreign naval experts believe the commander of a tactical element must constantly have exhaustive decisionmaking information on enemy forces and enemy operations in a given area, as a rule within a radius of at least 250 nm (the effective range of ship offensive weapons), and he also must determine the enemy concept based on this information. The task of determining and covering the situation must be done in such a way as to ensure maximum concealment of friendly forces.

A number of foreign specialists also call SIGINT passive EW. The increased role of signal, acoustic and optoelectronic intelligence in situation coverage is connected with a striving by commanders of tactical elements to minimize the operation of their electronics in an active mode, thereby ensuring high covertness of forces, which in foreign navies has been given the name "silent navy."

SIGINT includes COMINT and ELINT. U.S. Navy EW specialists take COMINT to mean reconnaissance of enemy HF and VHF/UHF tactical radio communications channels with a determination of the location of radio emission sources, and ELINT as detection of emissions of enemy radiotechnical microwave equipment (basically radars). Since COMINT requires operators to have certain linguistic knowledge as well as the ability to evaluate the command and control level and organizational subordination of the detected radio based on fragmentary communications intercept data of a varying nature, this determines the lesser prevalence of COMINT in navies than ELINT.

ACINT is performed by surface ships and submarines on enemy active sonar equipment emissions and on his other acoustic fields. Performance of optoelectronic intelligence (IRST) reduces to detecting thermal fields of enemy ships and airborne objects.

The electromagnetic environment is determined by searching for, intercepting and direction-finding the emissions of enemy electronics and sonar equipment, as well as

making a recording and technical analysis of them. The final stage of its determination is an identification based on COMINT, ELINT, ACINT and IRST data of the target electronic and sonar equipment platforms and their classification as friendly, neutral (unidentified) or enemy, and also a display of data on maps and terminals of tactical element CP's and ship combat information centers. Identification of target electronic and sonar equipment platforms and their operational-tactical tie-in are the primary mission in the process of determining the electromagnetic environment.

Another important mission of ELINT, and to a lesser extent of COMINT, is OTH target designation for long-range antiship and operational-tactical missiles. The main role is played here by the process of direction-finding the target's active electronic equipment emissions. OTH target designation data are transmitted over NTDS channels of the tactical element to missile fire direction devices of ship attack systems.

Among merits of COMINT, ELINT, ACINT and IRST in determining the situation and supporting OTH target designation, foreign specialists include preservation of concealment of friendly forces, OTH ranges of detecting enemy electronics with a rather high position-determination accuracy, and the possibility of rapid automatic classification of emissions; among shortcomings they include the impossibility of reliably determining the electromagnetic environment under conditions of total or partial enemy radio silence and the difficulty of organizing OTH target designation at the tactical element level.

A large role is set aside for EW measures in supporting operational-tactical maskirovka of ship elements; this is accomplished in accordance with the cover and deception (C&D) concept developed back in the early 1980's. The ultimate goal of these measures, in the figurative expression of American naval specialists, is to create an "impenetrable umbrella" over and under the tactical element which deceives enemy reconnaissance, surveillance and target designation personnel and equipment, thereby covering friendly forces against enemy attacks from the sea, from the air and from beneath the water. This concept is based on three interrelated and interdependent components: reconnaissance, concealment of friendly forces, and disinformation of enemy forces. It must be noted that the basic part of practical EW measures within the scope of the C&D concept is aimed at performing missions of C³CM (Command, Control, Communications Countermeasures), "combating the battle management system" of the enemy by affecting its various elements. Measures aimed at disorganizing communications and combat information exchange systems have been given the name "offensive" EW abroad, and other measures are "defensive" EW.

Data of all kinds of reconnaissance for determining the air, surface and underwater situation serve as the basis for accomplishing measures for maskirovka of forces at sea during an operation.

EW measures to conceal friendly forces are based above all on protecting friendly electronics against enemy reconnaissance and surveillance equipment. Concealment of friendly

forces includes measures of the "friendly electronic emission control" plan, which regulates the conditions and sequence of using friendly electronics, above all active equipment, and measures of the "communications security" plan, providing for modes of communications equipment use, volumes and priorities of information transmitted over the radio, as well as protection of friendly communications channels against enemy communications intelligence.

A third component of this concept is disinformation of enemy forces, achieved by creating a vague situation for them, particularly a false electronic and sonar situation where the main role is played by ECM and ECCM. Disinformation measures are aimed at making it as difficult as possible for the enemy to obtain adequate, timely information about friendly forces and protecting friendly forces against his ECM.

Depending on technical features of implementation, EW measures supporting operational-tactical maskirovka are divided into communications, electronic, radionavigational, sonar and antispace measures. Communications maskirovka measures reduce to performing communications deception by imitating the operation of friendly and enemy communications equipment and also by changing radio traffic volumes on friendly radio nets and by deliberately violating measures for concealment and security of functioning of the friendly communications system.

Electronic maskirovka includes simulating friendly forces on dummy axes (dummy orders and the formation of a dummy electromagnetic environment), active and passive jamming of enemy electronic equipment, and also distorting the thermal fields of ships and aircraft and reducing the radar signature of the order as a whole.

The goal of radionavigation maskirovka is to preclude enemy use of friendly and international radionavigation (including space) systems and ensure stable functioning of one's own navigation systems in operations, especially under conditions of the enemy's purposeful disorganizing effect on them.

Acoustic maskirovka is a key element in providing stability and reliable antisubmarine defense of ship tactical elements. Acoustic maskirovka measures are aimed at creating maximum difficulties for enemy submarines in detecting, tracking and using their offensive weapons against ships and submarines of the tactical element, and also at facilitating performance of ASW missions. Acoustic maskirovka includes conducting ACINT, implementing acoustic maskirovka measures against the detection of friendly forces by enemy sonar, and also creating a dummy acoustic environment by conducting sonar countermeasures and simulating sonar fields by changing modes of operation of ship and submarine power plants and also their motion.

Antispace maskirovka is a component part of warfare against the space echelon of the enemy navy command and control, communications and intelligence system. It envisages conducting disinformation measures on satellite communications channels and satellite telemetry data exchange channels, use of smoke and aerosol screens by

tactical elements both at sea and in bases, and certainly the use of dispersed combat formations and dummy orders.

According to the U.S. Navy EWMP (Electronic Warfare Master Plan) document, all aforementioned EW measures to ensure maskirovka of forces at sea regardless of their form must be accomplished in a comprehensive, interrelated manner. In addition, the effectiveness of these measures must be sufficient regardless of the operational and tactical situation that has formed.

The third set of EW measures of ship elements—protection against antiship missile and torpedo ordnance (ASV(T)D)—is a key element in supporting antimissile defense and torpedo countermeasures of task group ships.

In the opinion of foreign specialists, these measures are divided into two kinds depending on their practical implementation. The first includes measures for protecting ships against antiship missiles and torpedoes using weapons, i.e., surface-to-air missiles, anti-aircraft and general-purpose high-rate-of-fire guns (against antiship missiles); and rocket-propelled depth charges and antitorpedo torpedoes (against torpedo weapons). Measures aimed at destroying an attacking antiship weapon by fire have been given the name "Hard Kill". The other kind of measures includes nonfire-delivery methods of protection, "Soft Kill," which are not inferior to the first measures in effectiveness, but are considerably cheaper in means of implementation. The principal place in "Soft Kill" is given to EW, since the target of its effect here consists of electronic equipment and homing systems of the weapons attacking the ships.

"Soft Kill" measures are based on a combination of two basic components of EW—ESM and ECM. In protection against antiship missiles and torpedoes ESM reduces to conducting ELINT, ACINT and IRST for early detection of a launch and identification of the attacking missile or torpedo, determination of its location at each point in time, and clarification of its target as well as its type of homing system. It is very important to know from where the missile or torpedo was launched (position and type of launch platform). That information is transmitted from reconnaissance equipment to the active and passive jammers and to ship SAM systems and air defense guns. Introduction of ELINT, ACINT and IRST in a certain tactical situation is combined with use of active means of detection (radar, sonar and so on) and visual lookout.

Electronic and sonar countermeasures systems working in tandem with intelligence-collection equipment disorient missile and torpedo homing systems, divert them to decoys or lead them away from the chosen target of attack by active and passive jamming. According to provisions of modern western tactical manuals and guides, it is of great importance here to combine EW measures with maneuver in heading and speed by the ship being attacked to reduce her radar, sonar, thermal and visual signature, which helps break the lock-on of homing systems.

The conceptual provisions examined above for EW at sea formulated in navies of the main western countries by the early 1980's also dictated the technical policy for developing and building EW systems and complexes necessary

for their practical realization. Its basis consisted of a number of specific programs for developing and creating naval EW equipment and systems that were specialized or oriented toward comprehensive performance of several missions at the same time.

American specialists believe the principal direction in their development is a unification of COMINT, ELINT and IRST as well as active and passive jammers into automated systems supporting the principal requirement placed on them: maximum reduction in time of response to electronic emissions (or the time for jamming). To this end they will make wide use of digital computers, with which it is possible to perform missions of automatic detection, determination of coordinates, classification and assessment of the degree of risk of emitting electronics and their platforms, and also development and execution of a decision for using active and passive jammers.

Thus the increased outfitting of navies with electronic equipment increases the importance of winning and firmly holding superiority in the EW sphere. In this connection western navies give great attention to developing new concepts of combat employment of EW equipment and systems and to carrying out major comprehensive programs for their development.

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M-50 Diesel: 'To Improve Reliability...'

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[Article by Captain 3rd Rank V. Morozov]

[Text] The family of M-50 diesels is one kind of ship technical equipment presently being operated in the Navy. Experience has shown this equipment to be distinguished both by rather high cost as well as insufficiently high reliability indicators in operation, demoballing, storage, preparation for start-up, start-up, and in the course of servicing during operation. In short, a number of features are inherent to it which must be taken into account in practical activity. This is even more necessary because the task of improving reliability and longevity of ship technical equipment is becoming more and more urgent under conditions of reduced Navy financing. An analysis of M-50 diesel operation (makes M-847 and M-849) permitted accumulating some servicing experience and performing certain studies aimed at improving their reliability and also offering a number of recommendations for making design changes in them, which are considered in this article according to the functional systems described.

Cooling system. A cooling system change envisages cooling the oil in a lubricating-oil cooler with outside water instead of fresh water. It then becomes possible to achieve and maintain optimum diesel system parameters under different climatic conditions and different diesel generator loads. Optimum system parameters are as follows: fresh water temperature at diesel generator outlet +65° to +75°C; oil temperature at diesel generator outlet +65° to +75°C.

Temperature stresses in monoblocks are lowered under these conditions and the diesel lubrication regime improves, which increases mean time between failures of diesel monoblock elements by approximately 20 percent and that of VKhD-5 water coolers by two or more times. Because of this, failure-free performance indicators of the article as a whole also improve.

Fears expressed about the possibility of salinization of the diesel and its oil system through the MKhD-4 lubricating-oil cooler in the course of lengthy use of this regime were not borne out. And oil salinization occurs only in the oil tank if the MKhD-4 cooler seal is breached. True, it must be noted that with mean time between failures of outside-water pump graphite seals of 2,000 hours, their failure can lead to salinization of oil in the diesel crankcase and of the entire oil system with outside water.

Lubricating-oil system. The seal of the lubricating-oil system suction line seriously affects reliability of diesel operation, and locating the spot of its failure is a laborious task since even a small crack or faulty sealing of joints of its fittings is enough for oil pressure to drop below operating norms in the part of the system under pressure. This problem is solved by installing a restriction device (needle valve) on the oil tank venting system between the diesel crankcase and oil tank. Overpressure (approximately 0.1 kgf/cm²) is created in the oil tank by adjusting the restriction device, and oil pressure in the lubricating-oil system suction line accordingly becomes higher than atmospheric pressure.

Thus, main line oil pressure remains constant with a seal failure of this part of the lubricating-oil system. Under these conditions it is within limits of operating norms for 350 hours of DGAS [not further expanded; probably ship diesel generator set] operation. The need for flushing oil filters every 170 hours of operation disappears and under certain operating regimes an opportunity appears to use the diesel continuously for 350 hours.

To prevent coking of oil filters with used oil it is additionally necessary to open and clean out the oil tank every 350 hours of operation when changing oil. This improvement was implemented on five diesel generators earlier. Fears expressed about the possibility of a significant increase in oil tank pressure and deformation of it and the DGAS frame were not borne out in practice.

Emergency protection system. It is common knowledge that the critical parameters of diesel generator emergency protection being used fully meet diesel operating norms. They are set at up to +105°C oil temperature and up to 95°C water temperature.

When the emergency protection system operates because of +95°C temperature of fresh water in the cooling system and a pressure drop in it, water boils and steam forms as a result of the diesel stopping. Experience shows that fresh water temperature increases to +110°C or higher, high cylinder liner thermal stresses arise and as a result cracks appear in them and there is liner seal failure. Therefore the emergency protection parameter for this indicator—fresh water temperature—must be reduced to +82° to +85°C,

which will preclude the aforementioned negative consequences, although it will require more careful monitoring of the dynamics of water temperature change. With the article in a serviceable condition, oil temperature does not exceed +95°C, and therefore it also is more advisable to set the value of the emergency protection parameter for oil temperature at this limit.

Fuel preparation. Experience indicates that fuel preparation quality also has a substantial effect on M-50 diesel reliability indicators. In practical activity, proper attention is not always given to this question everywhere because of organizational difficulties and the design of fuel supply systems on naval ships. A feature of high-rpm diesels of this type is the presence of high dynamic stresses on crank mechanism elements and also high thermal loads on monoblock cylinder liners and upper parts of pistons. In addition, fuel equipment of M-50 diesels is distinguished by high sensitivity to the fuel supply quality.

Experience indicates that at least 50 percent of atomizers fail with a half-hour operation of the diesel on fuel with 2-3 percent water content. Similar results are obtained with a 0.5-1.0 percent water content in the fuel, but with diesel operation of more than 100 hours. And here such fuel equipment elements as high-pressure fuel pump plunger pairs and fuel-injection nozzles become unserviceable. This in turn deteriorates the quality of the fuel-air mixture and its combustion process and increases unevenness of the temperature field in the space above the piston. In addition, the combination of high dynamic stress of crank mechanism elements and low quality of fuel combustion in the space above the pistons of some cylinders can lead to an imbalance of dynamic loads and to an additional increase in stress on crank mechanism elements.

With lengthy diesel operation under these conditions it is possible even to have a failure of crank mechanism elements, and unevenness of the temperature field in the space above the pistons can lead to piston failure or the appearance of cracks in the cylinder liner. A sign of failure in operation of fuel equipment elements is increased vibration with normal adjustment of the diesel and its elements and with alignment of the diesel as a whole. At the same time, vibration may not set in with uneven, jet atomization of fuel by the nozzle. These observations served as the reason for design and organizational-technical changes in the fuel preparation system implemented under conditions of "Bditelnyy"-Class patrol ships and ship repair facilities.

With the changed fuel preparation system, fuel goes to the diesel generator fuel feeder tanks from the fuel engines after the ST-500 filters. The fuel preparation system of the main engines ensures a supply of the requisite quantity of fuel and includes the following basic elements: fuel oil service tanks, STs-3 fuel separators and FNT filtering elements as well as ST-500 water-separation filters. The diagram is not given due to design simplicity. Fuel supply to the DGAS fuel oil service tanks does not affect parameters of operating main engines. It also should be noted that for M-50 diesels which are part of main power plants of other types, it is possible to recommend similar changes

in the fuel system or installation of STs-1.5 fuel separators together with the FNT filtering elements and ST water-separation filters. Similar solutions were arrived at independently aboard several Pacific Fleet ships.

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Design Project 61 Large ASW Ships

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[Articles by Captain 1st Rank V. Nikolskiy, candidate of technical sciences, associate of Navy Central Naval Construction Scientific Research Institute; and by V. Yukhnin, doctor of technical sciences, professor, chief and chief designer of Northern Planning and Design Office, and P. Vasilyev, engineer, associate of Northern Planning and Design Office, under rubric "Ships Are Leaving Formation"]

[Text] *The air defense/ASW patrol ship "Komsomolets Ukrainy," the world's first large combatant ship equipped with a gas-turbine power plant, became operational with the Soviet Navy thirty years ago on 31 December 1962. The simultaneous appearance in our Navy of two fundamentally new combatant ships (on 30 December 1962 the "Groznyy," lead guided missile cruiser of special construction—Design Project 58, also was turned over to the Navy for the first time in world naval construction practice) opened up broad horizons in the sphere of creating surface ships of the qualitatively new ocean-going naval fleet originating in the USSR in those years. "Komsomolets Ukrainy"-Class large ASW ships (by order of the CinC USSR Navy they were placed in this type of surface ships as of 1 February 1966), which gave a worthy account of themselves in operation and confirmed their high seaworthiness, became the initiators of a new type of ship for our Navy, large ASW ships.*

Although "Komsomolets Ukrainy"-Class ships never belonged to the Soviet Navy's destroyer type and despite the fact that they were created as "fundamentally new air defense/ASW patrol ships," they largely corresponded in characteristics and combat purpose to guided missile destroyers which appeared abroad in the postwar period. Supporting the deployment of our submarines in sea and ocean zones came to the foreground among surface ship missions in those years—the USSR Navy was beginning to perform combat patrol duty in areas of the World Ocean where the probable enemy's ships were located. To provide air and antisubmarine defense of ship forces, appropriate combatant ships were required capable of successfully countering the new weapons of naval warfare—nuclear powered submarines, supersonic aircraft and missile weaponry of the probable enemy, who was planning to employ guided missile frigates and destroyers for those same purposes.

After harshly evaluating capabilities of Design Project 56 ("Spokoinyy"-Class) destroyers and Design Project 50

("Gornostay"-Class) patrol ships with their torpedo-gun and antisubmarine weapons then being built in our country, Navy specialists concluded that the latter were no longer capable of effectively performing ASW and air defense missions and needed a qualitatively new replacement. Therefore in accordance with USSR Council of Ministers decrees of 17 and 25 August 1956, basic directions were defined in the area of creating fundamentally new combatant ships, including an air defense/ASW patrol ship. The operational requirements which preceded the design-operational requirements gave this ship the missions of antisubmarine and air defense of ships and vessels at sea against attacks by submarines, low-flying aircraft and guided cruise missiles. Based on these operational requirements, approved by the CinC Navy on 14 March 1956, the Navy Central Naval Construction Scientific Research Institute [SRI] began working out the design-operational requirements for designing a modern patrol ship. A parallel preliminary study of this design project (designated No 61) was made by the Northern Planning and Design Office (at that time Central Design Bureau-53 of the USSR Ministry of the Shipbuilding Industry in Leningrad) under the direction of Chief Designer B. I. Kupenskiy. Work which both organizations—both the Navy Central Naval Construction SRI and the Northern Planning and Design Office—did in a relatively brief time period confirmed the tactical advisability and technical feasibility of creating such a ship. In December of that same year the CinC Navy also approved design-operational requirements for designing the Design Project 61 patrol ship.

In participating in the study of design-operational requirements of this patrol ship, the Navy Central Naval Construction SRI carried out conceptual designing during which not only was the ship's armament mix chosen, but her most rational configuration also was formulated. Of seven versions considered by the Central Naval Construction SRI for accommodating armament it was the final (seventh) one that was taken as the basis for subsequent work and was implemented with slight changes in designing and building the ship. It is noteworthy that approval of materials of the draft design-operational requirements in Navy central directorates based on a finding of the Central Naval Construction SRI as to the advisability of using a gas-turbine power plant as the main power plant signified creation of a rather large combatant ship with a unified all-gas-turbine plant, and FOR THE FIRST TIME in world practice. On 30 April 1957 the USSR Council of Ministers approved basic elements of the Design Project 61 air defense and ASW patrol ship for subsequent preliminary design development (Table 1). This design project was submitted to the CinC Navy for consideration in late June of that same year and was approved by him on 3 September 1957. About two weeks later, on 18 September, the country's Council of Ministers also approved basic specifications and performance characteristics of the ship being designed (Table 2).

Table 1

Kind of Weapons and Technical Equipment, Shipbuilding Elements	According to Operational Requirements	According to Design-Operational Requirements	According to Preliminary Design	According to Contract Design
Air Defense Weapons	4 long-range SAM launchers (16-20),	2x2 long-range SAM launchers (12 missiles),	2x2 SAM launchers (16 missiles),	
	1 SAM control system,	2 control systems,	2 control systems	
	3x2 76.2-mm guns (1,200 rounds)	2x2 76.2-mm guns (700 rounds)	2x2 76.2-mm guns (600 rounds)	
	2(3)x4 57-mm automatic air defense guns (1,200 rounds per gun)	-	-	-
	1 fire control system		2 fire control systems	
ASW weapons	2 ASW guided missile launchers (4-6 missiles)	1 ship-based KA-25 ASW helicopter with take-off and landing pad		
	2 RBU-6000 [ASW rocket launcher] (80-96 ASW rockets)	2 RBU-6000 (96 RGB-60 ASW rockets)		
	-	-	2 RBU-1000 (24 RGB-100 ASW rockets)	
	1x3 345-mm ASW torpedo tubes or 2x2 345-mm ASW torpedo tubes (6 torpedoes)	1x5 400-mm ASW torpedo tubes (5 torpedoes) or 2x2 400-mm ASW torpedo tubes (4 torpedoes)	2x3 533-mm torpedo tubes (6 torpedoes)	1x5 533-mm torpedo tubes (5 torpedoes)
Radiotechnical equipment	1 sonar, 1 radar	1 sonar, 2 radars		2 sonars, 2 radars
Full speed, knots	36	36	36	35
Range at operational-economic speed, nm/knots	3,000-3,500/18	3,500/18	3,500/18	
Endurance, days	15	15		10
Standard displacement, tonnes		2,800	3,200	3,380

Table 2

Basic Ship Specifications and Performance Characteristics	Lead Ships by Design Projects and Classes			
	"Charles F. Adams"	"Komsomolets Ukrainy" (Design Project 61)	"Sderzhanny" (Design Project 61-m)	"Rajput" (Design Project 61-me)
Year commissioned/number in series	1960/23	1962/19	1973/1	1980/5
Displacement, tonnes: standard/full	3,370/4,570	3,400/4,390	4,101/4,974	4,050/4,570
Principal dimensions:				
design waterline length/maximum length, m	128/133.8	132.2/144	134.5/146.2	134.5/146.2
design waterline beam/maximum beam, m	14.35	14/15.8	14/15.8	14/15.8
draft with full displacement, m	4.58	4.6	4.84	4.87
Speed, knots: full/economical	34/20	34/18	32/18	32/18
Range, nm/knots	1,880/30	2,000/30		
	4,500/20	3,500/18	4,000/18	4,000/18
Crew (including officers)	353/23	266/22	320/29	312/33
Armament				

Table 2 (Continued)

Basic Ship Specifications and Performance Characteristics	Lead Ships by Design Projects and Classes			
	"Charles F. Adams"	"Komsomolets Ukrainy" (Design Project 61)	"Sderzhanny" (Design Project 61-m)	"Rajput" (Design Project 61-me)
missile	Harpoon antiship missile (4-6 missiles per SAM system launcher), Tartar SAM system (36-38 missiles)	2x2 Volna general-purpose SAM system launchers (16 missiles)	4x1 P-15M antiship missile system launchers (4 missiles), 2x2 Volna general-purpose SAM system launchers (16 missiles)	4x1 P-20 antiship missile system launchers (4 missiles), 2x2 Volna general-purpose SAM system launchers (16 missiles)
gun	2x1 127-mm guns	2x2 AK-726 76.2-mm guns (600 rounds per gun)	2x2 AK-726 76.2-mm guns (600 rounds per gun), 4x6 30-mm air defense gun systems (3,000 rounds)	1x2 AK-76 76.2-mm guns (600 rounds per gun), 4x6 30-mm air defense gun systems (3,000 rounds)
ASW	1x8 ASROC ASW guided missile launchers (8 missiles), 2x3 324-mm ASW torpedo tubes	1x5 PTA-53-61 533-mm torpedo tubes (5 torpedoes), 2 RBU-6000 (96 RGB-60 ASW rockets), 2 RBU-1000 (24 RGB-10 ASW rockets)	1x5 PTA-53-61 533-mm torpedo tubes (5 torpedoes), 2 RBU-6000 (96 RGB-60)	1x5 PTA-53-61 533-mm torpedo tubes (5 torpedoes), 2 RBU-6000 (96 RGB-60)
aviation		Take-off and landing pad, 1 KA-25 helicopter	Take-off and landing pad, 1 KA-25 helicopter	Hangar, 1 KA-25 helicopter
radiotechnical	Radars: AN/SPS-10F, AN/SPS-40B, AN/SPS-52B, AN/SPG-60	Radars: Angara (2), Turel (2)	Radars: Kliver (1), Angara (1), Turel (2), Vympel (2)	Radars: Kliver (1), Angara (1), Turel (1), Vympel (2)
	Sonars: AN/SQS-23	Titan (1), Vychegda (1)	Sonars: Platina with towed device	Sonars: Platina with towed device

The Northern Planning and Design Office completed Contract Design 61 in March 1958 and in August of that same year it was approved by heads of the Ministry of the Shipbuilding Industry and the Navy. Development of detail drawings, begun back before contract design approval to speed up construction, was completed in November 1959. Initially V. Danilov and later O. Safronov, officers of the Central Naval Construction SRI, were assigned from the Navy Main Shipbuilding Directorate to observe the designing of the ship.

The ship was designed in a difficult situation of continuous growth of weight-size characteristics of contractor equipment. Thus, during the time which passed from preliminary design (developed in 1958) to contract design, the weight of surface-to-air missile feed devices increased by 11 tonnes, that of instruments of SAM system control systems and automatic equipment by 26 tonnes, that of the main power plant and supporting systems by 25 tonnes and so on. As a result, all this led to an increase in standard displacement. The final change in the ship's weapon mix was the replacement of two triple torpedo tubes by one quintuple bank of tubes in the contract design stage. Contract design approval by the CinC Navy took place on 18 August 1958.

The creators of Design Project 61 paid special attention to the choice of type, mix and configuration of weapons, technical equipment and power engineering. At the same time, a practice had formed in the world's leading naval powers of developing special surface-to-air missile systems for naval needs, particularly Talos, Terrier, Tartar and Sea Slug, or using air force developments, the Sea Sparrow SAM system. In any case, army systems (Nike Hercules,

Hawk and so on) never were modernized for the navy, probably because creators of army SAM systems treated their weight-size characteristics very freely, and this was unacceptable for ship and aircraft systems. Our Navy chose a different path—modification of ground SAM systems for the Navy; this consisted basically of developing a new launcher and SAM loading system and also modifying the control system and missiles themselves. Development of a SAM system, which was given the code M-1 in the Navy and later the official name Volna, began in the Ministry of the Shipbuilding Industry's SRI-10 in 1955. I. Ignatyev was appointed chief designer. It was proposed to include in the new system a stabilized launcher (the code ZIF-101 was applied when the SAM system became operational in the Navy) designed for two SAM's, a storage and loading system (a magazine with two vertical drums for 16 SAM's, code V-600), prelaunch preparation and automatic launch equipment, and the Yatagan control system. The Air Defense Troops ground SAM system was taken as the base system (P. Grushin was chief designer of the SAM).

Depending on the target's flight altitude, the range of the Volna SAM system could reach 15 km at that time. Missiles were guided to the target on the Yatagan radar beam until the moment the radar fuze operated. The principal advantage of this system was the possibility of using "cheap" SAM's, and a deficiency was the single-channel nature against a target and deterioration of firing accuracy with increased range. Modern SAM's basically use semiactive or active homing, with beam-rider guidance used only in the initial phases (Standard, Aegis), or homing alone (Sea Dart, Sea Sparrow). Tartar (1960), the U.S.

Navy SAM system with a purpose similar to Volna, initially also had a radar-beam-guided SAM, but subsequently it received a control system with semiactive radar homing in the terminal phase. The control system being used in this radar complex also was installed in various modifications on ships built in the 1980's.

A prototype of the Volna SAM system underwent expanded tests during 1959-1963 aboard the destroyer "Bravyy," refitted for these purposes from a Design Project 56 ship as a Design Project 56-k destroyer. But subsequently this SAM system did not become widespread and was accommodated only on Design Project 61 large ASW ships (air defense/ASW patrol ships) and also on Design Project 58 and 1134 guided missile cruisers and on Design Project 56-a destroyers and Design Project 57-a ASW ships being modernized at that time. This shows that the engineering solutions contained in Volna were deemed insufficiently promising, especially against the background of a new aviation system being developed at that time in a special design bureau (headed by M. Bisnovat) for the TU-128 long-range air defense fighter. The basis of this system was the R-4RR all-aspect missile. Its initial range (around 12-16 km) subsequently was brought up to 40 km. The missile was equipped with a semiactive radar homing head. Dimensions of the Smerch control system were "an order of magnitude" less than its analogues of the Yatagan control system. For the sake of fairness it must be noted that internal system modernization of the Volna SAM system was carried on very actively. In particular it permitted increasing the range of fire and supporting the engagement of low-flying airborne targets and even surface targets. Thus the Volna SAM system turned into the first general-purpose SAM system.

As follows from Table 2, to show the combat capabilities of Design Project 61 ships it is advisable to compare and analyze them with respect to specifications and performance characteristics of the American destroyer "Charles F. Adams," which is close to them in years commissioned, missions, tactical-technical elements, and type and mix of weapons and technical equipment. It is obvious that both ships have SAM, general-purpose gun, and torpedo ordnance and developed radiotechnical equipment aboard. But in contrast to the Design Project 61 large ASW ship, "Charles F. Adams"-Class destroyers are outfitted with the Harpoon antiship and ASROC ASW missile systems and have no rocket-propelled depth charge launchers or ship-based helicopter. A comparison of the type and mix of armament of these ships indicates the following. In outfitting with air defense weapons, thanks to the presence of two general-purpose SAM system launchers and two 76.2-mm automatic guns, Design Project 61 ships have the capability of bringing fire on four airborne targets simultaneously, while the guided missile destroyer "Charles F. Adams" could only bring fire on two (one SAM system and one 127-mm gun). But because of the greater unit of fire of SAM's, the latter could combat the air enemy for a more lengthy time interval; the Design Project 61 ship "lost out" to this destroyer in gun armament due to the absence of medium-caliber guns as well as, by the way, due to the absence of an antiship missile system. Thanks to the

presence of the ASROC ASW missile system, the "Charles F. Adams" somewhat surpassed the Design Project 61 ship in ASW armament, but this superiority was slight, since the ranges of fire of our 533-mm ASW torpedoes were commensurate with those of the ASROC ASW missile system. Our ship's rocket-propelled depth charge launchers were inferior in combat effectiveness as applied to the close-in kill zone of submarines of the American guided missile destroyer's 324-mm torpedoes, but they also could be used against enemy torpedoes and even in firing against the shore. Radiotechnical equipment of the Design Project 61 ship was somewhat inferior both in nomenclature and in capabilities to American analogues installed on this ship. At the same time it must not be forgotten that Design Project 61 ships were equipped with such weapons and their support equipment as a whole essentially FOR THE FIRST TIME in our Navy and still met necessary requirements for performing the missions facing them. Use of the KA-25 ASW helicopter (Chief Designer N. I. Kamov), which became operational somewhat later (1964); of the RBU-1000 ASW rocket launchers intended for destroying attacking enemy torpedoes; of a new early warning air search radar; of a new sonar system consisting of an all-around looking search and target designation sonar and of a sonar supporting the firing of ASW rocket launchers against an underwater target also was envisaged here for the first time. These Titan and Vychegda sonars became operational in the Navy in 1962 (with codes MG-312 and MG-311 respectively) and were created under the direction of Chief Designer A. Vlasov in the Ministry of the Shipbuilding Industry's SRI-3. They provided a submarine detection range up to 5 km in an echo ranging mode. Combined yard and official state tests of these sonars were conducted on the lead Design Project 159 patrol ship. Titan and Vychegda arrays were installed in the sound-transparent fairing of the lifting-lowering gear developed to support placing the ship in existing domestic docks, reducing her draft and lowering hull resistance at high speeds. In addition to these sonars the fairing accommodated the Khosta underwater sound communications and identification sonar array (code MG-26). Initially MR-300 radars with Nikel and Khrom state identification gear were used as general acquisition radars and later were replaced by the more modern MR-310 and MR-500 radars. The same "fate" also befell the Don navigation radars, which were replaced by new Volga radars. In addition to the above weapons and equipment, a device for receiving and transloading mines was envisaged on the ships.

As of the time we created such ships as the Design Project 61 air defense/ASW patrol ship, the leading naval powers still had not come up with a unified view on using gas turbines in naval construction. The exception was Great Britain, where work to introduce a gas turbine plant was proceeding across a broad front. Later other foreign fleets also took up the baton beginning in the late 1960's. These foreign plants were based on converted turbojet aircraft engines. That approach helped introduce the most advanced achievements of aircraft gas turbine building to ship turbines faster and gave an opportunity for a wide

selection of their suppliers. Somewhat later, in the 1970's, all this permitted leading foreign naval powers not only to eliminate their fleets' lag behind ours in the sphere of ship gas-turbine plants, but also to move forward in a number of indicators.

A different path was chosen in the USSR—creating special marine gas turbines at specialized enterprises, which at first permitted passing the West in the majority of indicators. By the moment design-operational requirements for the Design Project 61 ship were approved, the M-2 gas turbine was being developed in our country for the power plant of a patrol ship of another design with lesser displacement. The design stipulated a turbine output of 15,000 hp and a service life of 1,000 hours. It was proposed to use the turbine for thrust augmentation. While design-operational requirements were being worked out, an opportunity was identified for creating a geared gas turbine unit of greater output, 36,000 hp, based on the M-2 turbine engine within acceptable time periods; it was to include two 18,000 hp nonreversing gas turbines. The unit's service life was guaranteed at 500 hours at a ship speed of 24 knots. A version with Leningrad Kirov plant gas turbines, which had greater economy and service life than the aforementioned ones, also was considered in parallel (design of the Mashproyekt Special Design Bureau of the Southern Turbine Building Plant, Nikolayev). But the aggregate output of the Leningrad turbines (15,000 hp) proved insufficient, and a three-shaft version of the Design Project 61 ship main power plant was not considered.

A two-shaft all-gas-turbine plant with two autonomous geared gas turbine units and reverse-reduction gear was approved in the final version. Each main geared gas turbine unit (code M-3) included two 18,000 hp engines (aircraft turbines), a main thrust bearing and foundation frame. It was the first time in world practice that a reverse-reduction gear of such great power was created for the M-3 plant.

The service life of each engine was specified as 3,000 hours, of which it was supposed to operate 100 hours at 100-percent power, 200 hours at 80-percent power and 2,700 hours at 50-60-percent power. Delivery of M-3 units from the manufacturing plant was planned for the end of 1959. It was also decided to use Ekonomayzer Plant GTU-6 gas turbines as drives for the propelling electric generators, since there were no diesel generators with acceptable service life. It is noteworthy that the weight of the Design Project 61 ship gas-turbine plant was cut approximately in half with an output identical to that of the Design Project 56 destroyer steam-turbine power plant, and overall output of the entire Design Project 61 electrical power system (2,800 kw) was 2.5 times greater than that of the Design Project 56 destroyer. Four 600 kw gas-turbine generators and two 200 kw auxiliary gas-turbine generators were included in the makeup of the Design Project 61 ship's electrical power system. It was an especially important circumstance that the Design Project 61 ship gas-turbine plant enabled emergency preparation for a cruise from a cold state in 10 minutes with subsequent immediate development of speed to 30 knots in 2-3

minutes and full speed in another 5-6 minutes, i.e., ALMOST 24 TIMES FASTER than for ships with a steam turbine plant. The gas turbine plant for the Design Project 61 ship was developed by Mashproyekt designers under the direction of S. Kolosov and N. Makhlov. The turbine sets were assembled by specialists of the Southern Turbine Building Plant (now the Nikolayev Zarya Production Association).

Such a main power plant was disposed separately on the ship and occupied three watertight compartments—the forward and aft engine rooms as well as the auxiliary machinery room. The engine rooms shared two small compartments between themselves, which guaranteed the main power plant high survivability with combat and operational damages. Stabilizers, auxiliary boilers, fresh-water evaporators and other equipment were installed in one of these compartments. Each engine room accommodated one main geared gas turbine unit, two gas-turbine generators and one diesel generator. There were also special sealed cabins here for remote control of the power plant.

Increased noise and heat release during operation must be included among features of gas turbines of Design Project 61 ships which affected the levels of acoustic and heat fields of the latter. To reduce parameters of these ship physical fields, designers provided for the following in particular: lining inner surfaces of air-supply ducts and exhaust gas paths with mats of sound-absorbing materials; reinforcing the soundproofing of stations and living and duty spaces; shock-absorbing the main engines, electric generators and other noise-producing machinery; using sound-absorbing couplings on shaft lines; gluing a special vibration-damping coating on foundations; and installing gas-cooling devices in smokestacks providing a temperature reduction of discharged gases at the top of the stack to 180°C. It is not without interest to note that designing and testbed trials of the M-3 main geared gas turbine unit were conducted simultaneously with designing and building of the lead ship. This naturally created known difficulties, but at the same time shortened the time periods for creating the new class of ship and constructing the series.

Captain 1st Rank V. Nikolskiy,
Candidate of Technical Sciences,
Associate, Navy Central Naval Construction SRI

A feature of the Design Project 61 ship design was relatively high placement of missile weapons and of control system antenna posts and use of light gas-turbine engines in the main power plant. In the specialists' opinion, all this created certain difficulties in meeting requirements with respect to wind load which the ship was supposed to withstand before capsizing (according to requirements, design wind velocity was around 34 m/sec). As a result of studies of different versions of a lines drawing, a new shape of hull lines was adopted with a break in the side (from the 45th frame to the transom) between lower and upper decks and a clear-cut bilge formation. That solution met ship stability requirements and also permitted adopting the

minimum necessary beam for accommodating the main power plant and other equipment. Very sharp hull lines in the forebody were adopted and the length-beam ratio reached 9.5 in connection with a constant increase in displacement and the danger of a shortage of design speed.

To ensure overall longitudinal strength, the Design Project 61 ship's welded steel hull was made with a longitudinal framing system and was divided into autonomous compartments by 13 main transverse watertight bulkheads to ensure survivability. It was designed for the dynamic effect of forces, including the effect of a nuclear burst, for the first time in domestic designing practice. The IOKhSND shipbuilding steel was used as the main material of hull and structures in areas where masts of SAM system launchers, control system radars, automatic equipment, as well as the conning post were accommodated. Superstructures as well as masts were formed for the first time from AMG-5V light alloy, which permitted reducing their weight by 30 percent. Use of sliding joints of the new structure provided for "disconnecting" superstructures from participation in overall ship hull flexure, since the length of the main superstructure was approximately two-thirds the length of the upper deck. A weight reduction of superstructures helped ensure the ship's necessary meta-centric stability.

An architectural feature of Design Project 61 ships also was the four gas-outlet funnels, with their dimensions chosen based on ensuring the possibility of replacing turbines through hatches accommodated in the funnels and also on the need to reduce exhaust gas temperature through extensive mixing of the gas with air in the funnel casing. Such funnels were disposed crosswise to the ship hull in the plane of the frames.

The contract design envisaged storing 940 tonnes of diesel fuel, 70 tonnes of fresh water for crew support and 13 tonnes of boiler water for auxiliary boilers in the double-bottom space formed by running the second bottom for approximately 80 percent of the hull length measured at the waterline.

The disposition of living and duty spaces on the ship had substantial features, the only exception being the ship control, main power plant control station, officer cabins, corridors and the mess-crew arrangement. At the suggestion of the Central Naval Construction SR1, all ship spaces were designed to be pressurized in accordance with new requirements for protection against nuclear weapons and also with increased complexity of ship weapon systems. A ventilation system with air cooling and antichemical ventilation was provided in pressurized stations where personnel were to be located.

In addition, there was a new disposition for a number of battle stations and spaces. For example, the primary ship control station was disposed separately from the conning post in the ship hull on the lower deck. The power plant and damage control station was disposed in a small space and performed monitor functions for controlling the main power plant. Although that disposition scheme of the primary control station and conning post and of the power

plant and damage control station and the remote control station was preserved in subsequent designs of our surface combatants, further centralization essentially led to turning the conning post into a primary control station and the power plant and damage control station into a unified remote control station.

Loss of the British destroyer "Sheffield" in 1983 after one cruise missile hit in the vicinity of such a power plant and damage control station cast doubt on the advisability of existing centralization from the standpoint of invulnerability. Even earlier the experience of local wars and military conflicts showed that both the primary control station as well as the conning post had to be protected at least from fragments of munitions hitting the ship. In this regard the primary control station accommodated in the hull and the conning post protected by steel structures on the Design Project 61 ship met these requirements to a certain extent.

Finally, an important feature of this ship's overall layout was creation of a continuous corridor in the superstructure with "bow to stern" passage, which gave personnel access essentially to all battle stations without emerging on the upper deck in a combat or storm situation. Exit topside (to the upper deck) was only through the gastight locks of this corridor.

To reduce radioactive contamination of outer surfaces a special water shielding system was envisaged on the ship with water delivered from a fire main through sprayers (capacity of fire pumps on the order of 700 tonnes/hr).

A number of measures also were provided to reduce parameters of the ship's own physical fields (magnetic, acoustic, electrical, thermal and certain others) for protecting against the probable enemy's influence mines, influence-firing torpedoes and antiship missiles. For example, the radar signature managed to be reduced somewhat through a small tumble home of superstructure walls, and the thermal field was cut approximately in half by mounting special ejection-type gas coolers in funnel casings.

The combat capabilities of ship weapons under heavy sea conditions managed to be increased by installing active roll stabilizers on the Design Project 61 ship in the form of a pair of side rudders retracting into the hull (as also on the Design Project 56 destroyer and Design Project 57-bis large missile ship). Using such rudders at 18 knots provided approximately a threefold reduction in rolling amplitude.

A number of steps were taken to increase the possibilities of crew habitability. Officers were accommodated in one- or two-place cabins (true, for the first time in our Navy's practice some officer cabins were disposed in the area of the ship's centerplane without natural lighting), warrant officers and chief petty officers in two- and six-place cabins, and petty officers and seamen in bunk rooms, the largest of which was designed for 71 sleeping places. For the first time in our Navy's practice the design envisaged the presence of a mess seating 110 for first-term service personnel dining (later the number of seats was brought up

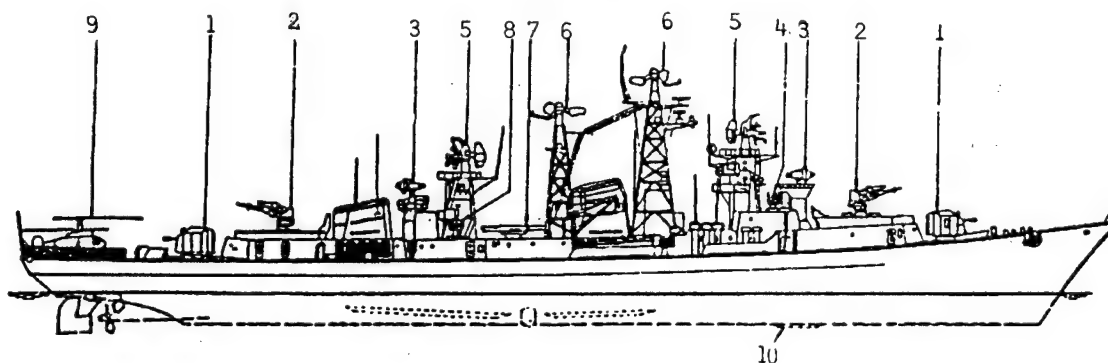
to 136 on series Design Project 61 ships), which considerably simplified organization of personnel dining.

According to the design project, provisions endurance for Design Project 61 ships was 10 days, but this proved insufficient for combat patrol duty at a distance from basing areas and supply ships. Subsequently possibilities were studied for increasing useful areas of provision rooms on series Design Project 61 ships, but this problem managed to be solved fundamentally only in the process of modernizing Design Project 61.

And we again return to "Komsomolets Ukrainy." Under Contract Design Project 61, this lead ship was built at the Nikolayev Shipyard imeni 61 Communards, located at the confluence of two rivers, the Yuzhnyy Bug and the Ingul.

L. Yentis was assigned as chief builder of "Komsomolets Ukrainy." The length of construction of the lead Design Project 61 ship (from laying-down to signing of the acceptance report) was 39 months, while a similar indicator for "Slavnyy," a series ship of this design built at the Leningrad Shipyard imeni A. A. Zhdanov, was 26 months. And here are a few more dates from the "Komsomolets Ukrainy" biography: lofting of sections—September 1958; beginning of metalworking—January 1959; laying the ship down at the building berth—15 September 1959; launching—31 December 1960; presentation for testing—15 October 1962. Cost indicators for Design Project 61 ships also are interesting: overall costs (in 1962 prices) were approximately R30 million for building the lead ship and around R17.4 million for building a series ship.

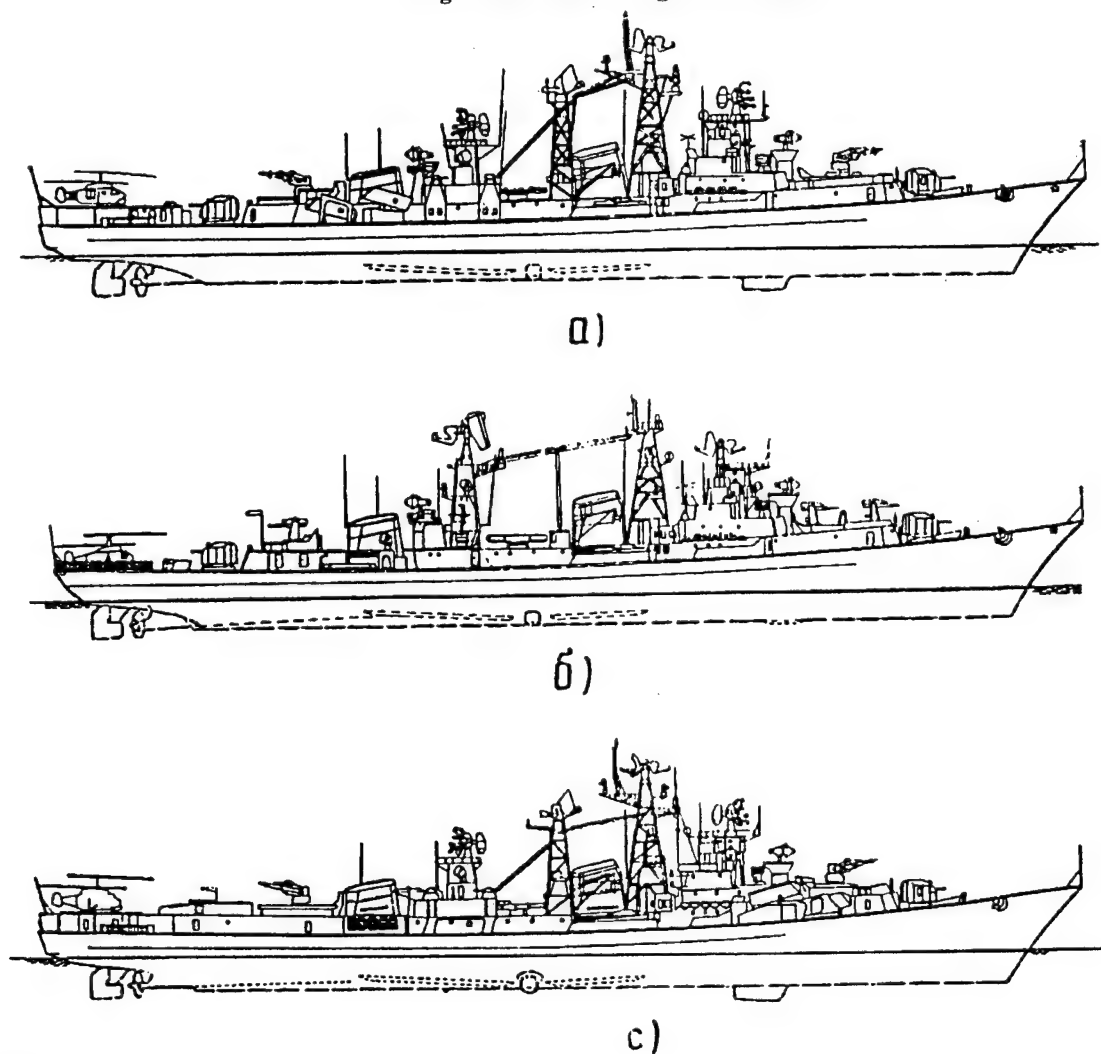
Fig. 1. Side view and diagram of arrangement of standard mix of weapons and equipment of Design Project 61 large ASW ship:



Key:

1. AK-726 (ZIF-67) 76.2-mm general-purpose automatic gun
2. ZIF-101 forward launcher of Volna general-purpose SAM system
3. Antenna post of Turel (MR-105) gun fire control radar
4. RBU-6000 ASW rocket launcher
5. Antenna post of Yatagan control system radar of Volna general-purpose SAM system
6. Antenna post of MR-300 radar
7. PTA-53-61 533-mm quintuple bank of tubes
8. RBU-1000
9. KA-25 helicopter
10. Titan and Vychegda sonar dome

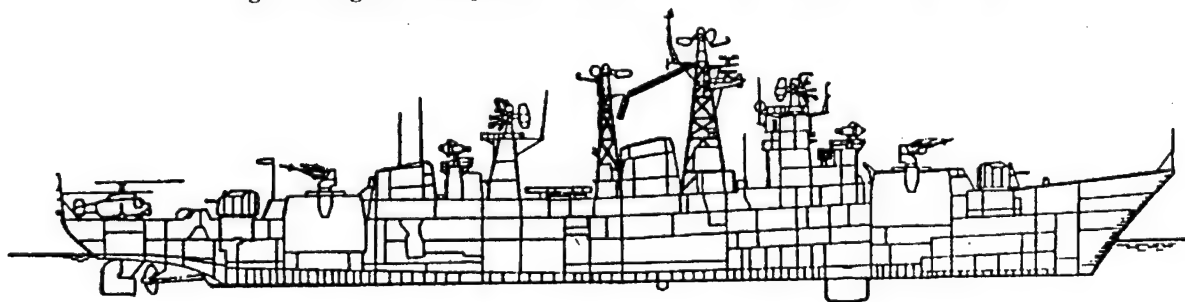
Fig. 2. Side view of large ASW ships:



Key:

- a. Design Project 61-m
- b. Design Project 61-e
- c. Design Project 61-me

Fig. 3. Design inboard profile of Design Project 61 large ASW ship hull



Since the ship was being fitted with a fundamentally new power plant, it was necessary to develop a special methodology for testing this plant. Its sea trials preceded sea trials of the ship herself. These main power plant trials were conducted near Sevastopol in January 1962. The principal task was to determine maneuvering qualities and the noisiness of gas turbines and check to see that its characteristics conformed to specifications. In addition, there was a check of the effectiveness of thermal protection means, reliability of shock-absorbing devices and behavior of geared-turbine units and gas turbine generators (made on an elastic foundation) with ship oscillations. Nevertheless, the ship's gas turbine plant had not been completely worked out by the beginning of her official state testing.

Official state testing of "Komsomolets Ukrainy" was conducted under a complete program but with a restriction on output of gas turbine units to 65 percent of nominal, which permitted reaching a speed on the order of 30.3 knots instead of the design speed of 34 knots. These tests were conducted on the Kherson measuring line on 24 October 1962. In addition to speed, the main power plant output and number of revolutions of propellers with POU-12 sonar dome raised and lowered were measured in them. Main power plant output at 30.3 knots exceeded design output by 12 percent with ship displacement of 3,790 tonnes and POU-12 lowered, and by 17 percent with POU-12 raised (with a displacement of 3,860 tonnes). The deviation in number of rotations of propellers was only 3 percent. These deviations in values of output and number of revolutions were caused by fouling of the ship hull in the period from June 1962 until the time tests were conducted. The power limitation was established by joint decision of the Ministry of the Shipbuilding Industry and Navy and was occasioned by the fact that interdepartmental (testbed) trials of the main geared gas turbine unit had not been finished by the time ship construction was completed. In accordance with that decision, the lead Design Project 61 air defense/ASW patrol ship "Komsomolets Ukrainy" was commissioned in the Soviet Navy "with a restriction on machinery output and speed." It must be added that at the building yard in September 1963 it was planned to replace all her turbines, which were part of the M-3 and GTG-6 units, with new ones developed by industry. When these problems were resolved later in July 1964 the ship developed a speed of 35.5 knots in trials, i.e., she exceeded design speed by 1.5 knots. By the way, full speed was 34 knots or somewhat more on essentially all ships of this series commissioned after the lead ship. The design range also was confirmed. At the same time certain shortcomings of Design Project 61 were noted: poor reliability of first models of the Volna SAM system and Turel control system; insufficient range of Titan and Vychegda ship sonars during "work" of the latest antisubmarine torpedoes to maximum range; high noise in ship posts and spaces caused by extensive main engine noise (especially in areas of air-supply ducts and exhaust trunks); considerable capacity of ship ventilation servicing battle stations and, in addition, the absence of sufficient experience for that period in designing ships with gas turbine plants.

It was planned to build 20 air defense/ASW patrol ships under Design Project 61; the Navy received 19 by 1972. Construction was carried out at two shipyards: imeni A. A. Zhdanov in Leningrad (now the St. Petersburg Severnaya verf Production Association) and imeni 61 Communards in Nikolayev. The former built five ships: "Ognevoy" in 1964, "Obraztsovyy" and "Odarennyy" in 1965, and "Slavnyy" and "Stereushchiy" in 1966. Construction took place under yard numbers 751, 752, 753, 754 and 755 respectively. In addition to the lead ship "Komsomolets Ukrainy," yard number 1701, the second yard gave the Navy another 13 ships: "Soobrazitelnyy" (No 1702) in 1963, "Provornyy" (No 1703) in 1964, "Otvazhnyy" (No 1704) in 1965, "Stroynyy" (No 1705) in 1966, "Krasnyy Kavkaz" and "Reshitelnyy" (Nos 1706 and 1707 respectively) in 1967, "Smyshlenyy" and "Strogiy" (Nos 1708 and 1709) in 1968, "Smetlivyy" (No 1710) in 1969, "Smelyy" and "Krasnyy Krym" (Nos 1711 and 1712) in 1970, "Sposobnyy" (No 1713) in 1971, and "Skoryy" (No 1714) in 1972. "Sderzhannyy" (No 1715), the 20th ship of this series, was laid down in Nikolayev under Design Project 61, but in the process of construction was modernized under Design Project 61-m and commissioned in 1973. The modernization basically consisted of accommodating four cruise missiles and reinforcing air defense and ASW weapons (AK-230 30-mm gun systems, Vypel control systems, MR-300 and MR-500 general search radars, and Start EW equipment system). In connection with an increased number of personnel, two superstructure tiers were added behind the navigating bridge to accommodate officer cabins. The ship's provision endurance was brought to 25 days. The aforementioned changes led to a reduction in the ship's metacentric stability, which had to be compensated by stowing more than 100 tonnes of solid ballast and using tanks with the permanent fuel reserve. This necessitated reinforcing the hull and led to an increase in displacement and a reduction in full speed.

Subsequently another five Design Project 61 ships underwent similar modernization (but already under Design Project 61-mp) (yard numbers 751, 752, 753, 754 and 755). At the Yard imeni A. A. Zhdanov it was "Ognevoy" (modifications completed in 1973), "Smyshlenyy" (1974) and "Slavnyy" (1975); and at the Yard imeni 61 Communards "Smelyy" (1975) and "Stroynyy" (1980). During 1974-1976 "Provornyy" (No 1703) was refitted under Design Project 61-e to accommodate new equipment and weapons (Uragan SAM system and Fregat radar system) on this ship for trials with subsequent installation of series models on ships of new designs. But planned modernization of other ships under this design did not take place. Thus, by the end of the 1970's Design Project 61-m and 61-mp large ASW ships had been transformed into our first multipurpose ships.

It should be noted that even on ships of subsequent designs that harmony of tactical-technical elements was not always successfully achieved as occurred on Design Project 61 ships. It was this harmony that in 1974 drew the attention of an Indian delegation which was seeking a prototype ship needed for its Navy and which had an opportunity to

familiarize itself with our surface combatants in Sevastopol. As a result Design Project 61-m large ASW ships were chosen as the prototype.

In the mid-1970's the Northern Planning and Design Office developed the new Design Project 61-me (Chief Designer A. Shishkin) under order from the Indian Navy based on this design, and five such ships were built at that same Nikolayev Yard imeni 61 Communards and turned over to the client: "Rajput" ("Nadezhnyy") in 1979, "Rana" ("Gubitelnyy") in 1981, "Ranjit" ("Lovkiy") in 1983, "Ranvir" ("Tverdy") in 1985 and "Ranjivay" ("Tolkovyy") in 1987. They were built under yard numbers 2201, 2202, 2203, 2204 and 2205. Thus, Design Project 61-me ships became the first rather large surface combatants in an export version.

The fate of Design Project 61, 61-m, 61-mp and 61-e large ASW ships turned out variously, but all operated intensively in all our ocean-going and sea-going fleets, since with such qualities as high reliability and possibility of unit replacement of engines after using up engine time, the main power plants permitted even relatively old ships which had not been repaired for a long time to develop full speed. In addition, despite the 18-knot economical speed established by the design, they operated most often at speeds of 22-24 knots with relatively slight reduction in range.

Design Project 61 ships were milestones not only in domestic but also in world naval construction. Subsequently the United States used that very power plant scheme on the destroyer "Spruance" and cruiser "Ticonderoga."

The large ASW ship "Otvazhnyy" was lost on 30 August 1974 20 nm from Sevastopol. An unsanctioned ignition of a missile launch stage in the after SAM magazine led to an explosion and fire which just could not be localized.

The large ASW ships "Soobrazitelnyy," "Krasnyy Krym" and "Krasnyy Kavkaz" received guards naval ensigns on being commissioned. "Smelyy" was leased to the Polish Navy in 1987 and was the flagship under the name "Warszawa," replacing a Design Project 56-a destroyer (former "Spravedlivyy") at this post; the latter had served in the Polish Navy for over 20 years by the same name until the large ASW ship's transfer to the Polish People's Republic. A limited number of ships of design projects 61-m and 61-mp presently remain in our naval order of battle. The majority either were written off and sold for scrap (particularly "Provornyy," "Stroynyy," "Smyshlenyy," "Ognevoy," "Odarennyy" and "Slavnyy") or were mothballed. At the present time all remaining ships of these designs are planned for removal from the Navy as morally and technically obsolete.

Creation of the series of Design Project 61 ships along with Design Project 58 guided missile cruisers ("Groznyy"-Class) was recognized by the Lenin Prize in 1966. A great contribution to the design's development was made by collectives of the Main Shipbuilding Directorate and other Navy directorates, the Navy Central Naval Construction SRI, Navy chief observers V. Avdeyev and V. Okatov, as well as representatives of the shipbuilding industry and related sectors of industry, and especially deputy chief

designers A. Pevzner and A. Terentyev, designers R. Vlashev, V. Trankov, L. Koltun, B. Berman and A. Trofimov, and many others who participated in creating these ships.

Experience accumulated in the process of designing and building these ships was realized in subsequent designs. B. I. Kupenskiy later became chief designer of the "Kirov"-Class heavy nuclear powered guided missile cruiser, and it was Design Project 61 that was the basis for initial studies in designing this firstborn of our country's nuclear powered naval surface fleet.

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Black Sea Fleet Commander Critical of WEU Intentions

MK1202140793 Moscow NEZAVISIMAYA GAZETA
in Russian 12 Feb 93 p 3

[NEGA report: "Crimea"]

[Text] Admiral Eduard Baltin, commander of the Black Sea Fleet, in an interview for Sevastopol Television, expressed a negative view of the intention of Western European Union [WEU] countries to send warships into the Black Sea.

The Admiral was critical of the WEU countries' idea of joint armed forces. "I do not like the idea that France, Italy, and Spain intend to create joint naval forces in the Mediterranean and use them in the Black Sea to control the straits," Baltin stated. "This is a bad decision by French diplomacy. France has never been a Black Sea state. If the governments of Ukraine and Russia adopt a corresponding decision, we will control the straits zone. We do not need help from France, Italy, and Spain," he summed up.

Asked about his relationship with the Ukrainian Navy command, the Admiral replied: "I am against the politicization of the Black Sea Fleet. It should not be a toy in the hands of certain power-hungry political currents. My main task is to prevent confrontation between the armed forces or within the fleet. I will fulfill the tasks set by the presidents of Russia and Ukraine."

CIS: REAR SERVICES, SUPPORT ISSUES

Report From Moscow Civil Defense Bunker

93UM0331A Moscow TRUD in Russian 24 Dec 92 p 1

[Article by Igor Tsarev: "A Bunker Beneath Sovetskaya Square: TRUD Correspondents Report From Moscow's Underground Civil Defense Headquarters"]

[Text] A group of foreigners was being photographed at the monument to Yuriy Dolgorukiy. They did not even suspect that beneath their feet lay a bunker which had recently been on the list of the city's most secret installations.

We were accompanied into the underground by I. Kuzyayev, chief of Moscow's civil defense staff. At the first door he stopped before the lens of an automatic television camera, picked up a telephone and said, "Let us in. I have TRUD correspondents with me." Somewhere, 40 meters down, a duty officer pressed a button and there was a click of the lock. An arched passageway with thick cables snaking along the walls led from there, followed by a spiral metal staircase, an elevator, another hall.... And doors, massive doors with metal bolt locks?....

Now we are in the multistory bunker. One has the impression that he is in an enormous submarine "aground" beneath the Moscow streets. Powerful compressors force in fresh air with a rumble, pumps noisily pump out ground water.... Suddenly the rumble of wheels is heard behind one of the doors.

"This is the exit to the subway tunnel," Kuzyayev says. We are actually in what was once the Sovetskaya Metro Station. In 1941 it was converted for military needs. Air-raid warnings were transmitted from here. Even the announcer's booth has been preserved.

A half-century has passed since then, but alert duty is still performed 24 hours a day in the bunker housing civil defense headquarters. Information on everything occurring in the city merges onto the central panel there. And if something out of the ordinary should happen, there are offices there for those who will direct rescue and other emergency operations to protect the population. There is equipment for intercepting radio and other transmissions and if necessary, for cutting into them with announcements. Prepared texts and notes are stored there for such an event.

"What event could 'bring to life' all of these facilities?" we asked Kuzyayev.

"An accident at a nuclear power plant near Moscow, a malfunction of a reactor at the Kurchatov Institute, for example, or a large fire...."

"Are there many such dangerous facilities in Moscow?"

"We refer to them as potentially dangerous, because with normal maintenance they can do no harm to anyone. The civil defense service keeps a close eye on every one of them, however. We have a total of 360 facilities in our register: plants, depots, chemical production facilities.... We also monitor sources of radioactivity used in medicine and in scientific research.

"The civil defense service is undergoing fundamental changes. In November the government of Moscow passed a new statute on the capital's civil defense. Teams have been set up for clearing up the aftermath of natural and other disasters and accidents. They have the most modern of equipment. Computers are even being installed on the vehicles, making it possible to obtain any kind of additional information on any facility or to learn how best to cope with a discharge of chlorine, ammonia...."

The civil defense service is prepared to assist at any time and continues to stand its undistinguished but important watch.

Civilian Retraining of Western Group Personnel

93UM0364B Moscow KRASNAYA ZVEZDA in Russian
13 Jan 93 p 2

[Unattributed report: "There Will Be New Professions"]

[Text] KRASNAYA ZVEZDA has already written that courses to retrain officers, warrant officers and members of their families have begun in the Western Group of Forces in accordance with the treaty between Russia and Germany. Some 22.8 million marks were allocated for that purpose.

A special group under the leadership of Major-General V. Kharseyev created at the headquarters of the WGF has carried out a great deal of organizational work. There were 1,638 servicemen and 3,164 family members who completed training in various fields in the third and fourth quarters of last year.

The classes were conducted by experienced and competent instructors. Only 32 out of a tough competition among 367 firms received the right to give instruction. They are training specialists in more than ten fields.

And what about in Russia, where the principal portion of the funds allocated by the Germans—129.32 million marks—will be spent? The first model training center has been created on the basis of two professional and technical schools in Saint Petersburg. Such centers will be opened in all regions where the troops in the Western Group of Forces are being withdrawn.

Center for Psychological Help to People in 'Hot Spots' Formed

93UM0364B Moscow KRASNAYA ZVEZDA in Russian
19 Jan 93 p 1

[Report by Aleksandr Zotov of KRASNAYA ZVEZDA under the rubric "From Our Information Bureau": "The Russian Peace-Keeping Center Will Help Those Who Are in 'Hot Spots'"]

[Text] The Russian Peace-Keeping Center [RMTs] (headquartered in Samara), in conjunction with the Public Culture Center of the MID [Ministry of Internal Affairs] and the MVES [Ministry of Foreign Economic Ties] of the Russian Federation, plans to render psychological and moral assistance to people, including Russian servicemen, who are in "hot spots" of the former USSR.

The President of the RMTs, the well-known Moscow experimental psychologist Vladislav Orlöv, proposes to all his countrymen that the year 1993 be considered a year for the creation of peace.

The contact telephone numbers of the center in Moscow and Samara are 153-85-30 and 33-48-94.

Signals Troops', Secure Communications Outlined

PM1602104793 Moscow KRASNAYA ZVEZDA
in Russian 13 Feb 93 p 3

[Interview with Major General Arnold Kalandin, chief of a Main Administration and the Government Signals Troops of the Federal Agency for Government Communications

and Information under the Russian President, by Colonel Nikolay Poroskov,; date, place not given: "Field Telephone for the President"]

[Excerpts] Our interlocutor is Major-General Arnold Kalandin, chief of Main Directorate and of the Government Signals Troops of the Federal Agency for Government Communications and Information under the Russian President.

Arnold Petrovich handed me, the first journalist to visit his office, a volume smaller than a paperback in a claret-colored oilskin jacket entitled "List of Subscribers to Government High-Frequency Telephone Communications." Beneath the title I read: "Second Special Department of the USSR People's Commissariat of Internal Affairs, 1940." It contained names that everyone knows: Beria, Budenny, Kaganovich, Stalin... The subscriber's apartment is given in parentheses. Stalin's was No. 230.

It also contained the names of regional leaders—between two and eight per republic and oblast. Not many, it must be pointed out. High-frequency communications were only just being introduced at the time and were used by a limited number of people. On the eve of the war there were only 40 government communications subscribers in Moscow and 337 country-wide. But what about today? The general pulled two large notebooks out of the safe, but did not offer to let me flick through them: The notebooks are classified.

[Poroskov] What is government communications, Arnold Petrovich?

[Kalandin] In any state the top leadership has a special communications system, which is effective, reliable, and, most importantly, secure. Or, if you like, secret. To manage the state, highly important sectors of industry, and the armed forces. And this is an extensive, ramified, multifunctional system.

[Poroskov] Is the list of users of these communications restricted by the very term "government"?

[Kalandin] No, these communications are used by the leaders of legislative and executive organs (not only at central level), highly important sectors of the national economy, the armed forces, law enforcement organs...

[Poroskov] Is there a user hierarchy? How many steps are there on this ladder?

[Kalandin] There are, let us say, several levels. The President—the Supreme Commander-in-Chief of the Russian Armed Forces—does of course have priority when it comes to provision of communications.

[Poroskov] As far as you are able, could you tell us about the government communications structure and the Troops' role therein.

[Kalandin] In December 1991, following the reorganization of the KGB and agencies under the former USSR's Council of Ministers, a new autonomous organ emerged—the Federal Agency for Government Communications and Information. Our Troops, as an integral part of the Main

Administration for Government Communications, are part of this organ, along with a number of scientific and technical subunits.

[Poroskov] What is their main purpose?

[Kalandin] The status of our formations is defined by the "Law on Defense." The Troops constitute a logical extension of the fixed-site government communications system that we have mentioned. They operate in areas where there is no fixed-site installation or where such an installation has been destroyed. Strictly speaking, the troops are meant to ensure government communications in wartime and during emergency situations in peacetime.

[Poroskov] That is, your subunits and units ensured communications at the time of the Chernobyl accident and the Armenian earthquake?

[Kalandin] Yes, almost all communications were disrupted in Armenia. But in those conditions members of the state commission could pick up a telephone bearing our insignia [telefon s gerbom] and contact Moscow within a matter of seconds. What is more, our troops ensured government communications during the accidents and disasters in Ufa, Yekaterinburg, Tver and Nizhniy Novgorod Oblasts, and during operation "Thunder" ["Grom"] to save the children taken hostage by terrorists.

[Poroskov] Are your people in the "hot spots"?

[Kalandin] Of course. Here is a most recent example—our provision of communications for the interim administration in the North Caucasus. And in the Dniester Region just before that.

[Poroskov] Are you always successful?

[Kalandin] If the task is assigned in good time, before the official's arrival, communications will be set up. Although it is sometimes extremely difficult to do this: You have to move troops to the area and deploy and adjust equipment... There have been cases of subunits coming under blockade, and there have been casualties among servicemen.

[Poroskov] If there are no emergencies, what do government communications troop formations do?

[Kalandin] Regrettably, there are plenty of emergencies today. But it is in any case necessary to work on combat, operations, and mobilization training. Moreover, a deployment base has to be prepared in order to ensure that the troops are capable of performing their tasks in wartime and peacetime. So we have enough work.

[Poroskov] One important function of the government communications troops is to ensure government field communications for the command of the Russian Armed Forces, in particular during major exercises. But the Army and Navy have their own secret communications apparatus, their own specialists...

[Kalandin] It is a question of levels. We ensure communications from the top down—from the president to the defense minister. But army structures do indeed have their own secret communications apparatus.

[Poroskov] With whom else do your troops connect the President?

[Kalandin] With the heads of other states, for instance, when the President is in a part of the country where there are no fixed-site government communications.

[Poroskov] Are government conversations recorded?

[Kalandin] No, that is ruled out both technically and organizationally.

[Poroskov] Do the troops have anything to do with the "nuclear attache case"?

[Kalandin] If the President is in field conditions, once again away from a fixed-site system, the government communications troops will enable him to give the prescribed signal.

[Poroskov] During the Caribbean crisis U.S. President Kennedy was unable to communicate with Khrushchev for a long time. The situation could have become uncontrollable...

[Kalandin] Today that kind of thing is precluded. The hardware's potential is such that two men on different sides of the Equator will be connected within 10 seconds, in 99 percent of cases at the first attempt. Especially presidents.

[Poroskov] Government Signals Troops subunits have to work in conditions where some kinds of communications are ineffective. In mountains, for instance. What is the range of the Troops' technical potential?

[Kalandin] They have landline, radio, microwave relay, satellite, troposcatter, and other communications systems. There are also new developments. The technology is mainly the same as that used by communications troops. With one difference: Our systems are protected—with special secret apparatus on communications channels.

[Poroskov] Today we are well aware of attempts by foreign intelligence services to intercept information by forming a kind of channel to divert this information. In the mid-fifties there was the 0.5 km tunnel from West Berlin to the Soviet cable, then an attempt to fit a "bug" to the underground cable in the Sea of Okhotsk; there was something similar in the Moscow region, and that is not all. Satellites and radioelectronic reconnaissance stations near our borders also intercept information. How securely are communications protected?

[Kalandin] Of course, a signal can be intercepted. But deciphered... Electronic systems can, for instance, code human speech so that a computer, working at a billion operations per second, will take decades to work through the possible combinations.

[Poroskov] So, when you pick up the government communications telephone can you be 100-percent certain that information will not be leaked?

[Kalandin] Provided you do not forget that you can be overheard outside.

[Poroskov] And provided that the cipher is not given away by one of your staffers?

[Kalandin] Our people—technical specialists—do not have access to the information that they transmit. Even switchboard operators, who, hypothetically speaking, "stick the plug in the socket," thus exclude themselves from the line. And the people who make up the ciphers—the cryptographers—work in their own narrow areas, often without knowing the whole picture.

[Poroskov] Government Signals Troops were created, for the USSR, as a unified system. How has the breakup of the USSR affected their work?

[Kalandin] Russia has lost about one-half the units and formations. We had quite a lot of forces in the West and, moreover, in all the republics, with the exception perhaps of Armenia and Moldova—with the requisite affiliation to districts and proposed theaters of military operations. Today there are difficulties with the operational performance of tasks, and shortage of troops and hardware is taking its toll. But we are doing our job, preserving and developing our collaboration with the national government communications troops. And we do have splendid highly trained specialists.

[Poroskov] Where do you train them?

[Kalandin] The main source of cadres is the Military Government Communications Institute in Orel. This used to be a college bearing the number of a troop unit—for reasons of secrecy. The officers of the future were only becoming familiar with specific pieces of communications technology. At the institute they receive more in-depth theoretical training and can independently study technical innovations. Officers receive a higher military education from the Military Signals Academy.

[Poroskov] Technical innovations are probably tested and introduced first within the government communications system?

[Kalandin] Yes, we were the first to scramble telephone conversations and to employ automatic connection of trunk calls, radio communications with automobiles, satellite communications with aircraft, and much else besides. We have pieces of equipment that are on a par with their foreign counterparts. There are advanced systems—fiber optic and digital communications systems, automatic telephone exchanges with electronic switching. The government Signals Troops are fully equipped with national technology. Part of it is regrettably outdated and worn out. Its replacement is being held back by economic difficulties and inadequate funding. [passage omitted covering history of government Signals Troops]

From the Editorial Office

Russian President B. Yeltsin sent congratulations to government communications troops personnel, workers, employees, and veterans. The message says in particular: "Your work is important in present conditions. Worthily continuing the traditions of the older generations, the troops reliably provide communications for Russia's top organs of state power and government." The President expressed confidence that personnel would continue to perform their constitutional duty with honor and maintain combat readiness at a high level, and wished them success and prosperity.

INTERREGIONAL MILITARY ISSUES

'Mistaken' Russian Training Attack on Ukraine Unit
93UM0397A Moscow NEZAVISIMAYA GAZETA
in Russian 23 Jan 93 pp 1,3

[Report by Aleksandr Pilat under the rubric "The Crimea": "Attack of the Naval Infantry: Did the Russian 'Black Berets' Make a Mistake?"]

[Text] At 00:20 on 21 January naval infantrymen of the Black Sea Fleet's 810th Coastal Defense Brigade attacked an air defense missile battalion of the Ukrainian Armed Forces, shelling it with blank rounds and smoke-puff charges.

A NEZAVISIMAYA GAZETA correspondent was told at the press center for the Black Sea Fleet that a sabotage and intelligence subunit of a coastal defense brigade of the naval infantry was engaged in scheduled training at precisely that time. The mission involved simulating an attack on one of the Black Sea Fleet's communication centers, but "the guys became confused and attacked the wrong unit."

Observers say that the attack was no accident, occurring on the eve of an illegal conference of Black Sea Fleet officers' assemblies to be held on 21 January and just prior to the meeting of CIS heads of state in Minsk. It was due only to the level-headedness of the commander of the Ukrainian unit, Aleksandr Milchenko, who ordered his men not to fire back to injure, that an armed conflict was averted. The Ukrainian Navy's press center has announced that the command element and all of the personnel in the Ukrainian fleet resolutely protest "such actions towards our brothers-in-arms." The press center stated: "What occurred cannot be regarded as an accident. Still in the minds of many of us are the recent peremptory actions of naval infantrymen of the Black Sea Fleet in which they seized the commandant's office and the fleet's health clinics in Sevastopol and moved combat equipment into a garrison where 70 percent of the servicemen had taken the Ukrainian oath." Incidentally, the unit which was attacked is in the town of Fiolent, which has residential buildings, other military units, dachas....

A NEZAVISIMAYA GAZETA correspondent contacted Rear Adm Boris Kozhin, commander of the Ukrainian Navy, by phone. He said that he had never before encountered such errors by the armed forces in his 30 years in the service. He feels that a commission should be set up to get to the bottom of everything which occurred. "I want to point out that is very serious," he said, "and all of us are very disturbed by it."

The Black Sea Fleet press center has been informed that the command element of the Black Sea Fleet's forward naval infantry brigade has issued an apology to the air defense unit of the Ukrainian Navy for the troubling incident.

Commission On Troop Entry, Check Point at Narva, Estonia

934K0401C Tallinn RAHVA HAAL in Estonian
16 Feb 93 p 1,3

[Article by Tiit Tambi: "Discussed in State Assembly's State Defense Commission"]

[Text] How and where did Russian military men cross the border?

For a few weeks now, passions have been flying high, both in the parliament and in the media, over the question of how did the few hundred members of the Russian military cross the border, and whether or not the Defense Minister and the Border Guard Service were lying when they denied it. The issue was clarified to some extent at yesterday's session of the State Defense Commission, but not completely.

Why did Edgar Aaro, chief of Border Guard's service department, tell media after a long delay that foreign soldiers did indeed come, but they did not know it because that particular shift was off duty at the time? Henn Karits, Border Guard engineer and chief of technical services, explained to members of the commission that, according to current procedures, the central office would be informed only of cases where crossing is attempted with documents that are not in order. If everything seems to be in order, the movement of the military men would be recorded indeed, but only in the documents of the border check point involved. The government decree regulating this procedure (No. 236, dated August 2, 1992) is incomplete and does not require reporting such instances.

The second question: Didn't the border guards question the validity of the permit, as it only bore the stamp of the ministry's construction department? No, they didn't. This is the way it has always been, because it is that particular department at the defense ministry that has been dealing with the property of the Russian military. The applicable government decree also does not require the defense ministry to inform the border guard or any other agency of the permits issued by it. Thus, it could easily happen that members of the Russian military, who assume they are moving about legally, can run into unexpected conflicts with the border guard, defense forces, Kaitseliit [Defense League] or police—whoever happens to run a check. Checks, however, could also be made on the basis of telephone calls received from the public, so it would be a good idea also to inform the population in advance, thus sparing a lot of confusion and anxiety.

Data at the disposal of the commission shows that at least five such entry permits—covering a total of 164 members of the Russian military—have been issued during the month of January this year. It was also known that last Friday, three covered military trucks marked "Lyudi" made an unchecked entry across the bridge of Narva, and that, on February 3, paratrooper carrier number 102 took a sizeable amount of building materials out of the military port of Paldiski. It turns out that we are still not capable of controlling our territory.

Doubts were raised by requests received from chief Gerasimov of the 144th Division. Two examples. Request number 47 dated January 11, for bringing in 250 soldiers, first approved by the defense minister on January 21. Second request numbered 25, also from military unit number 12129, dated January 13, for 16 soldiers, approved on the same day, that also has Gerassimov's name printed on it. Except the signature was ... different. And, does their calendar work backwards, so that the later request has a smaller, and not a larger number? A forgery?

The commission understands that sometimes there is a need for soldiers. For example, that last batch was supposed to start carting away ammunition from Männiku, and nobody has anything against that. Also, they are short of drivers. But things should be done legally and openly on both sides.

The commission decided to propose that the aforementioned decree be amended promptly so that, in the future, all agencies involved would be aware of each other's actions. A recommendation will also be made to the State Assembly, proposing that a joint commission of several commissions be formed to investigate the incident.

Setting up a temporary border check point at Narva For openers, commission chairman Rein Helme presented a short summary of what was seen and heard there by commission members and by the Isamaa [Fatherland faction] delegation. The problem has been attracting public attention for some time.

Working conditions of border guards are not up to standards. The processing capacity of the check points is extremely small. The motor bridge on the Narva River is very narrow and falling apart. Several options have been offered until a new and better bridge, or at least a pontoon bridge can be built upstream.

Henn Karits, head of the Border Guard's technical and engineering services, and its deputy executive director, clarified matters further. There is a steep ascent coming up from the administrative border ending at Peter's Plaza. On one side of the road is the Hermann fortress, on the other the bastion. Connecting the bridge to the heart of town is a bottleneck just about 300 meters wide, traversed daily by thousands of cars, and tens of thousands of people. This is the way it has been since the economic border was established. It's a good thing there was almost no snow this winter. Once a heavy vehicle is stopped on a steep ascent, it is almost impossible to get it going again.

According to rough sketches submitted by the Border Guard office, a system of lightweight, fold-and-mount barriers, made out of metal, could be constructed until the exact location of the state border can be determined. The government has allocated 5 million kroons for that purpose (several firms have submitted their plans, ranging in cost from 3.5 to 15 million). Now, the contractor has been chosen, the architectural design work completed, and the latter coordinated with Narva's mayor Vladimir Mizhui. This was agreed to with the city council for both the location and the rest of the solution, and the temporary border check point could have been ready in four months.

However, the Narva city council thought otherwise and forbade the city government to allocate the land at its last session last year. There were even threats directed at some of the builders starting to work on the earth. Contractor Haka Eesti AS has already completed most of the metal constructs, and has been receiving payments.

The Narva city council proposed that a permanent or a pontoon bridge be built outside of town. First, there are no funds. Secondly, they apparently forgot that a bridge also has another other end to which an access road would have to be built. Who wants to go through all these endless negotiations again? And that under circumstances, where we do not yet have an agreement with Russia in the matter of recognizing the borders set with the Peace Treaty of Tartu. It seems that this request is just another attempt by the council to drag things out. Forgotten is the fact that two thirds of the people going to-and-fro during the day are residents of Narva and Ivangorod. The city authorities of Narva are thus punishing their own people. (By their own logic, the whole flood of vehicles, or at least those coming from St. Petersburg, could be rerouted via Petseri, for example.—T.T.)

The government has discussed this divergence of opinion on two occasions and concluded that it is a case of constitutional conflict, or a loophole between two laws. The law On the Basic Premises of Land Reform, for example, empowers the state to take land from the local government if the state's interests demand it. This would also create a precedent, since the bigger disputes about lands vacated by the Russian army are yet to come.

That leaves another, and a more radical measure: To have the State Assembly cancel this particular resolution of the Narva City Council.

The state defense commission decided to support the proposal made by the Border Guard Service and allocate the land accordingly, so that construction could be completed on the temporary border check point.

Estonian Official Confusion over Entry of Russian Troops

Comments From the Chair of Parliamentary Defense Commission

*934K0405A Tallinn PAEVALEHT in Estonian
16 Feb 93 p 3*

[Article by Toomas Sildam: "Rein Helme: 'About the 164 Russian Solders' Scandal'"]

[Text] REIN HELME, chairman of the State Assembly's Defense Commission told PAEVALEHT yesterday that, speaking of 'the 164 Russian soldiers' scandal, one has to admit: The government and the Defense Ministry have behaved incorrectly, made mistakes and said reckless and unsubstantiated things. At the same time it shows that, once again, the opposition is out to make a scandal out of anything.

Rein Helme said that Defense Minister Hain Rebas "... should have stated clearly if a permission had been granted to bring the Russian soldiers into Estonia, when and by whom such a permission was granted, for what purpose,

and for what period of time." Even on the evening of February 11, Hain Rebas assured PAEVALEHT that, to his knowledge, no Russian military personnel had been brought into Estonia legally over the past few months.

"The Defense Minister thus opened the way to serious accusations about obscuring the issue," Rein Helme believes. "Such things should not be hidden from the people. As a historian I know that this kind of hiding has turned into a bitter lesson, even on the government level, during some of our great moments of crisis (in September of 1939, for example).

Helme also said that he "... cannot be satisfied with the Prime Minister's statement" of February 12. It was no longer possible to deny that these Russian soldiers were brought in, which is, after all, a confirmed fact.

At the same time, the Chairman of the Defense Commission is convinced that "... the opposition is out to make a scandal out of anything. If it hadn't been for that fabulous pretext of the Russian army, something else would have been drummed up."

Rein Helme recalled that Estonia does not yet have an agreement on the procedure or the timetable for removing Russian troops. We also do not have any readily verifiable information about the extent of men and materiel the foreign forces have here.

"All we do is make a lot of assumptions that could even be close to truth," Helme said. Besides, we are still bound by the "... resolution of the one-time Supreme Council providing that all assets of the Soviet armed forces located in Estonia are owned by Estonia. Actually, it is easy enough to see the Russians taking out their military equipment." Since the personnel of Russian troops has been 'drying up' "... the foreign forces simply lack the physical strength to guard all the objects or storage areas, and load up for transport, to boot," Rein Helme said.

"This is not to say that we should cater to the interests of the Russian army. But I would like to ask for some understanding of our cause to have the foreign forces leave here as soon as possible and, better yet, along with their belongings, which we don't need," the Chairman of the Parliamentary Defense Commission explained.

In his opinion, the '164 Russian Soldiers' Scandal' proves that "... the government will have to reach a fairly detailed agreement on how to organize the removal of foreign forces, or the defense ministry be given wide-ranging authority to settle these issues independently."

Toomepuu Criticizes Estonian Defense Minister over Weapon Sales

934K0405B Tallinn PAEVALEHT in Estonian
16 Feb 93 p 3

[Article by Tiit Veermäe: "Toomepuu Levels Corruption Charges Against the Ministry and the Minister of Defense."]

[Text] TALLINN (BNS). Jüri Toomepuu, Chairman of the faction Eesti Kodanik [Estonian Citizen], said in his presentation to the State Assembly yesterday that Estonia's Ministry of Defense is illegally selling weapons and wasting taxpayers' money.

Toomepuu said that Foreign Minister Trivimi Velliste is "directly and unashamedly" representing the interests of a foreign state. Toomepuu added that, next to Velliste, the greatest discredit to Estonia's government is the Defense Minister and his state defense. Toomepuu remarked that, at a time when "defense forces do not have enough weapons, and the Defense Minister is buying super-expensive weapons from Israel, thus jeopardizing our relations with the Arab states, the Defense Ministry is selling weapons on the open market, and at one third of the market price, at that." Toomepuu presented documents to show that, in his words, "... Hain Rebas is incompetent and a common thief of the state."

Estonian Border Guards Explain Misunderstanding

934K0405C Tallinn PAEVALEHT in Estonian
16 Feb 93 p 3

[BNS Release: "In Border Guard's Opinion There Was No Need To Inform the Government of Border Crossings by the Russian Military"]

[Text] TALLINN (BNS). "Members of the Russian military crossed Estonia's administrative borders legally and with permits at the Orava checkpoint, and the Border Guard did not see any need to notify the government of this right away," said Henn Karits, head of the Engineering-Technical department of the Border Guard Service.

Karits said that the government decree, dated August 6, 1992, covering border crossing procedures for the Russian military, is incomplete and does not obligate anyone to inform anybody else about such incidents. Karits admitted that the border guards could have shown initiative and done it on their own.

Aivar Engel, advisor to the State Assembly's Defense Commission, said that at the session where this issue was discussed, a decision was made that a proposal to change this decree be submitted to the government. The commission also decided to propose to the State Assembly that a commission, composed of members of the State Assembly, be formed to investigate what had happened.

The State Defense Commission decided to support the request made by the Border Guard Service to start construction on the Narva checkpoint, and to formalize the allocation of land for it.

UKRAINE

Morozov Order on Release of Personnel to Reserves

*93UM0337A Kiev NARODNA ARMIYA in Ukrainian
11 Nov 92 p 1*

[Order No 181 Issued by the Ukrainian Minister of Defense: "On Releasing From the Ranks of the Ukrainian Armed Forces to the Reserves Those Military Service Personnel Who Have Served the Appointed Terms of Military Service and the Next Call-Up of Citizens for a Term of Military Service in November-December 1992"]

[Text] In connection with the publication of Edict No. 478/92, issued by the President of Ukraine and dated 18 March 1992 "On Releasing to the Reserves Military Service Personnel and the Next Call-Up of Ukrainian Citizens for a Term of Active Military Service," I hereby issue the following order:

1. The following categories of military service personnel shall be released from the ranks of the Ukrainian Armed Forces to the reserves: soldiers and sergeants called up in November-December 1990, and those having a highr education—in November-December 1991, sailors and petty officers serving on ships, boats, or in the coast-guard units of the Navy, called up in May-June or November-December 1990, whereas those having a higher education, and who were called up in November-December 1991 shall be released to the reserves in November-December 1992.

2. In conducting the call-up of citizens for a term of military service, the requirements of the Ukrainian Law "On Universal Military Obligations and Military Service" shall be strictly maintained and adhered to.

The commanding officers of the military districts, the Black Sea Fleet and its associated components—as well as the commanders of groups, military units, and institutions—shall effectively organize the reception of the young recruits, create the necessary everyday conditions for their service, ensure a high level of discipline and good organization, and maintain the statutory interrelationships and reciprocal responsibilities among the military service personnel.

3. During the period of conducting the next call-up discipline shall be maintained throughout the entire military complex and its personnel at assembly and reception centers, stations, landing fields, and designated posts, as well as along the entire route of rail and motor-vehicle transport.

4. It shall be the responsibility of the Ukrainian Armed Forces General Staff to monitor the execution of this order.

5. This order shall be published in all companies, batteries, and on all ships.

[Signed] Colonel General K. Morov, Ukrainian minister of defense
Kiev
16 October 1992

Morozov Merges Air Forces, Air Defense Troops Into One Branch

*93UM0398A Kiev NARODNA ARMIYA in Ukrainian
4 Feb 93 p 1*

[Edict Issued by the President of Ukraine: "On Ukrainian Air Forces"]

[Text] In order to increase and upgrade military preparedness, as well as to reform the Ukrainian Armed Forces, and in accordance with Article 4 of the Ukrainian Law "On the Ukrainian Armed Forces," I hereby decree the following:

1. Based on the foundation of the Air Force and the Air Defense Troops, an integrated branch of the Ukrainian Armed Forces shall be formed; and it shall be known as the Air Force (for the military defense of our air space).

2. The Ukrainian Ministry of Defense shall form an administrative organ for the Ukrainian Air Force.

[Signed] L. Kravchuk, President of Ukraine
Kiev
28 January 1993

Officers Union Supports Government, Democratic Front

*93UM0398B Kiev NARODNA ARMIYA in Ukrainian
4 Feb 93 p 1*

[Declaration by Ukrainian Officers Union]

[Text] The Ukrainian Officers Union decisively condemns the political provocations of the pro-communistic, chauvinistic forces, intentionally aimed at destabilizing the situation in Ukraine—a situation which could lead to a fratricidal civil war and the demise of the independent Ukrainian state.

The Ukrainian Officers Union declares its full support for the Ukrainian President, Prime Minister, and Minister of Defense in their activities with regard to protecting and defending the independence of Ukraine and creating national Armed Forces.

The Ukrainian Armed Forces declares its own solidarity with the anti-communist, anti-imperialist front and will render it all manner of assistance in building an independent, democratic state based on the rule of law—one in which the highest value will be human beings, regardless of their religious faith, nationality, or social origin, and wherein universal human values will become the principles for the society's life.

The Ukrainian Officers Union declares that—together with all the democratic forces—it will defend Ukrainian independence to the last breath. It will do everything to preserve peace in the society and enhance the Ukrainian people's prosperity and well-being.

Adopted at the Plenary Session of the Ukrainian Officers Union on 30 January 1993 in the city of Kiev

[Signed] Hryhoriy Omelchenko, head, Ukrainian Officers Union

BALTIC STATES

Russian Troop Watch

934K0379A Tallinn THE BALTIC INDEPENDENT
in English 29 Jan-4 Feb p 3, 5-11 Feb p 3, 12-18 Feb p 3,
19-25 Feb 93

[Article by Lya Oll]

[29 Jan-4 Feb 93 p 3]

[Text]—Lithuanian police detained Major Vasily Skoblikov, commander of Russian army unit No. 10999, deployed in Alytus, southern Lithuania, who attempted to sell weapons to civilians in Alytus. More than 50 kilograms of explosives, 20 grenades, detonators, fuses, cartridges and a smoke-bomb were discovered in his car and garage (January 22). Major Skoblikov is the highest-ranking Russian officer to have been caught selling arms illegally in Lithuania.

—Russia's efforts to be admitted to the Council of Europe will remain futile until all ex-Soviet troops have left the Baltics, senior council of Europe official David Atkinson told a press conference at the Latvian parliament on January 21.

—French Defence Minister Pierre Joxe called the continuing presence of Russian troops in the Baltic States a destabilising factor posing a threat to security in Europe during his visit to Latvia (January 25).

—Russian air force planes continued unauthorised flights in Lithuanian airspace: thirteen flights were registered on January 19; one on January 20; three on January 21; one on January 22.

—Lithuanian border guards detained three Russian army soldiers without proper travel documents at the Siauliai railway station (January 20).

—A Russian army warrant officer from unit 11807 based in the Kaliningrad region was detained by Lithuanian guards in the Kaliningrad-Kharkov train in Kaunas for travelling without a permit. He was later handed over to local military officials (January 21).

—Two Russian soldiers from unit No. 49265 attempting to enter restricted Russian army facilities were shot and wounded by Russian guards (January 22); the soldiers were admitted to a hospital in Plunge, western Lithuania, with severe injuries.

—Lithuanian border guards in Marijampole detained a Russian army senior lieutenant travelling without an entry permit on the Vilnius-Kaliningrad train (January 25).

—No progress was made on the troop withdrawal issue at the latest round of Latvian-Russian talks in Jurmala, according to leaders of the two delegations (January 21). The head of the Latvian delegation, State Minister Janis Dinevic, said Russia had set additional conditions for the previously agreed withdrawal deadline of 1995 and had not yet submitted any pullout schedules. He also

said the Russian army owed Latvia 9 billion Latvian roubles for power supplies and for the use of land.

—Latvian border guards detained six armed Russian servicemen travelling from Moscow to Riga without entry permits (January 21).

—Only two of 70 units and installations included in the list of Russian troops withdrawn from Latvia presented by the headquarters of the Russian Northwestern Army Group on January 22 are actual combat units, according to Latvian officials. The others are sports facilities, support staff living quarters and construction units. Not all of the units included in the list have been withdrawn and facilities handed over.

—Russian air force planes continued violations of Latvian airspace: six unauthorised flights were registered on January 20; one on January 23; one on January 24; five on January 25.

—Estonian border guards confiscated ten boxes of training grenades, three boxes of cartridges and various loose weapons components which Russian troops tried to smuggle out of Estonia in trucks carrying army equipment (January 13).

—Russian air force officials signed documents handing over to Estonia an aircraft repair shop at the Haapsalu base in western Estonia, the first of the base's 500 installations to be handed over (January 25).

[5-11 Feb 93 p 3]

[Text]—Russian army officers in the Baltics are involved in illegal deals with army property, members of the Russian officers' union told a press conference in Riga on February 1. Chairman of the union, Colonel Vladimir Kandalovsky, who was dismissed from the army on December 11 for political activity, said that officers of the North-Western Army Group have been dismissed because of their efforts to disclose corruption in the army.

—Russia should keep its military bases in the Baltics which, together with Tajikistan and other Central Asian republics, "are and will be in a sphere of Russia's vital interest", a leader of the Russian Union opposition faction in the Russian parliament, Sergei Baburin, told journalists on January 28.

—Lithuania will allow the transit of Russian troops withdrawn from Germany through the Lithuanian cities of Klaipeda and Vilnius. An agreement had been reached at the Lithuanian-Russian talks in Moscow on January 22, the head of the Lithuanian delegation, Gediminas Serksnys, said.

—The Russian army airlifted 929 additional troops to Lithuania through the military airport of Kedainiai on January 19, although the Lithuanian Defence Ministry had earlier authorised the entry of only 207 additional troops to assist in evacuating the equipment of the 7th paratroop division deployed in Kaunas. The Lithuanian Foreign Ministry has sent an official protest over the issue to Russia's Ambassador to Lithuania (January 26).

- Russian air force planes continued unauthorised flights in Lithuanian airspace: fourteen flights were registered on January 25; nine on January 27; eleven on January 28; fifteen on January 29; three on January 30; one on January 31.
- Lithuanian border guards detained a Russian army officer in the Kaliningrad-Kharkov train who had no travel documents. He claimed to be going to his new posting to unit No. 06922 in Kaunas (January 25).
- Eight Russian troops, accompanied by two armed guards, were detained by Lithuanian border guards in the Moscow-Kaliningrad train and handed over to Lithuanian military authorities. Coming from army unit No. 53140 in Novosibirsk, Siberia, the troops were headed for their new postings in the Kaliningrad region, but had no transit permits (January 26).
- Lithuanian border guards of the Zagare checkpoint, northern Lithuania, together with their Latvian colleagues, aborted an attempt by Russian troops to establish an illegal border crossing from Latvia to Lithuania through a forest (January 28).
- Russian air force planes continued unauthorised flights in Latvian airspace: two flights were registered on January 26; one on January 27; seventeen on January 28; five on January 29; six on January 30; one on January 31.
- A Russian army tank regiment in the city of Ventspils in western Latvia handed over its facilities to the town's authorities on January 22. The troops are scheduled to leave Ventspils for the Kaliningrad region by mid-February.
- Latvian border guards detained four armed Russian army servicemen on the Moscow-Riga train at the Zilupe border post for trying to enter Latvia without proper permits (January 28); the four soldiers were sent back to Russia.
- The Latvian authorities have refused to register as residents about 42,000 persons working for Russian troops in Latvia until the North-Western Army Group command submits the Latvian officials a complete list of Russian army units stationed in Latvia (January 29).
- The Estonian Defence Ministry has revoked its earlier agreement to allow an additional 250 Russian troops into the country, to assist in the evacuation of ammunition from depots in Tallinn and equipment of army unit No. 12129 deployed in Tallinn (February 2).
- The Russian border defence forces in Estonia have handed over all border checkpoints to Estonia, with the exception of the Pirita post near Tallinn which is expected to be handed over to the Russian Embassy in Tallinn (January 29).
- The takeover of the Russian air base in Haapsalu is proceeding on schedule, according to head of the Estonian takeover commission, Hannes Loss (February 1).

The facilities were in a relatively good state of repair and the takeover will be completed by mid-February, he said.

[12-18 Feb 93 p 3]

[Text]—The US Congress has passed a resolution to the effect that the US will postpone its US \$400 million aid to Russia if it fails to withdraw its troops from the Baltic States within the established time frame.

- Representatives of the United States and Norway at the CSCE Higher Officials' Committee meeting in Prague called on Russia to settle the troop withdrawal question with the Baltics without tying it to other issues, while Russia said it was prepared to pull its troops out of the Baltics if Western countries helped build housing for the departing troops (February 4).
- A group of workers continues a sit-in in one of the shops of the Russian air force helicopter repair base in Kaunas, where they barricaded themselves in on January 19 in protest against the loss of their jobs after the withdrawal of the base, scheduled to be completed by early May. Russia has suggested turning the repair centre into a Russian-Lithuanian joint venture, and negotiations on the issue are being held at the governmental level.
- Russian air force planes continued unauthorised flights in Lithuanian airspace: 23 flights were registered on February 2; 24 on February 3; fourteen on February 4; twelve on February 5; two on February 6.
- The police in Kaunas detained a Russian army lieutenant in civilian clothing at the city's bus station carrying a bag with a grenade and a loaded Kalashnikov submachine gun (February 2).
- Lithuanian police detained eight armed Russian soldiers aboard the Kaliningrad-Riga train, who tried to enter the country without entry permits (February 3). The soldiers were sent back to Kaliningrad.
- A police patrol in Vilnius detained three Russian army soldiers from unit No. 36839 who had no travel permits: another two soldiers managed to run away (February 4).
- Lithuanian border guards in Kybartai detained two Russian army captains travelling without proper documents on the Kaliningrad-Kharkov train (February 6).
- Russian air force planes continued unauthorised flights in Latvian airspace: eight flights were registered on February 2; five on February 3; five on February 4; four on February 5; two on February 6.
- A column of eight Russian army trucks from unit 90450 in Liepaja, western Latvia, drove to Riga without proper travel documents (February 3).
- A joint commission of Russian and American experts visited the Russian radar station in Skrunda, western Latvia, to assess the possibilities of turning it into a research centre (February 2-4). The experts said the equipment was well-maintained but outdated; if a research centre was created it should not serve military purposes, they said.

- The Conservative Party of Latvia's Free Citizens announced they have launched a number of projects aimed at speeding up the withdrawal of Russian troops from Latvia, including building housing for troops in the Russian cities of Velikye Luki, Smolensk and Vologda (February 4).
 - Latvian border guards in Zilupe detained two Russian cadets with forged travel documents on the Moscow-Riga train (February 5).
 - Latvian border police have been guarding the Russian Air Force helicopter since January 29 when it landed illegally near the Latvian town of Ventspils. The commander of the helicopter claimed he had flown to Latvia from a Russian base in Estonia to pick up some troops. In early February the local customs department issued an order to confiscate the Russian-made MI-6 and fine its commander 2,000 Latvian roubles for violating Latvian airspace (February 9).
 - Latvian border guards detained three Russian army officers and a seaman in the Moscow-Riga train who tried to enter Latvia without a permit (February 7).
 - The command of the Russian North-Western Army Group has requested 328 more troops to be brought to Latvia to help repatriate military equipment from Adazi, Riga, Dobeles, Vangazi and Cekule (February 8). According to the chief of the Latvian bureau for monitoring the withdrawal of Russian troops, Ilgonis Upmalis, the request might be granted only after Latvia received the withdrawal schedules of the units in question.
 - The premises of the Russian naval unit No. 33074 in the centre of Tallinn have been handed over to Estonian defence forces (February 5). In July 1992, a shooting incident took place there between the Russian navy and the Estonian troops who had come to take control of the premises which the military had illegally rented out to a privately-owned company.
- [19-25 Feb 93 p 3]**
- [Text]—Under its proposed new foreign policy conception Russia will seek opportunities to determine the legal status of Russian troops in the Baltics and their withdrawal schedule, at the same time trying to maintain strategically important facilities (February 12).
- The Lithuanian Foreign Ministry sent a protest to the Russian Embassy over the law recently adopted by the Russian parliament which guarantees additional privileges to Russian servicemen in Transcaucasia, the Baltics and Tajikistan, "defending the constitutional rights of citizens in these countries" (February 12). The Lithuanian opposition leader Vytautas Landsbergis called the law a "provocation" and "threatening to Lithuania", and called for the CSCE, the Council of Europe and other international organisations to ask Russia to explain the meaning of this law.
 - All four military factories in Lithuania still remain under Russian control and have not been touched by the army withdrawal effort, according to the Defence Ministry spokesman Juozas Slavinskas (February 15). Some of the factories have attracted the attention of Western firms and the Lithuanian government has announced it will discuss their status with Russia.
 - Russian air force planes continued violations of Latvian airspace: one unsanctioned flight was registered on February 9; two on February 10; fourteen on February 11; twelve on February 13; ten on February 15.
 - Between February 7 and 15, Latvian border guards registered nine separate attempts by 39 Russian troops to cross the Latvian border illegally.
 - Latvian officials agreed to release the Russian air force helicopter held by border guards since January 29 when it flew from its base in Estonia to the Latvian town of Ventspils, crossing the border illegally (February 9).
 - The Latvian government decided to turn the reconnaissance vessel *Zond*, formerly belonging to the Russian Navy, to the Latvian Defence Ministry (February 12). The ship was seized by customs officials in January after it illegally entered the port of Riga.
 - A Russian army major from unit No. 21 618 tried to cross the Estonian border with a forged entry permit at the Murati checkpoint, southern Estonia (January 28).
 - A column of six trucks from the Russian army unit No. 01362 tried to take out equipment from Estonia without a proper permit and was detained by border guards at the Luhamaa checkpoint in southern Estonia (February 3).
 - Border guards of the Hara post in northern Estonia detained a Russian naval non-commissioned officer who had 200 kilograms of copper hidden in his car (February 3); on the same day the border guards detained four Russian navy seamen who tried to take out stolen copper cable from the port of Hara.
 - Russian border guards handed over to their Estonian counterparts two radar stations on the island of Hiiumaa and one on Saaremaa (February 16). According to the border department, the stations are all intact and in good working order.
- Estonian Defense Pros, Cons Debated**
 934K0403A Tallinn RAHVA HAAL in Estonian
 29 Jan 93 p 2; 17 Feb 93 p 2
- [Articles by Tõnis Jürine and Ants Sild: "Is Estonia Worth Defending?"]
- [29 Jan 93 p 2]**
- [Text] **RESERVIN JOHTAJA**, the current textbook for Finnish reserve officers, published in 1989, opens with the sentence: "Finland is a country worth defending!" This simple statement actually sums up the whole philosophy of state defense for any country.
- States do not create defense forces because somebody likes to do it, but for the same reason people equip their homes with doors, and their doors with locks. Theoretically, one

could buy a worthwhile book or recording of classical music for the money, thus making one's home more sophisticated and more valuable. And—also a more attractive target for thieves! We normally skip such philosophical ponderings, and act on the notion that our homes are worth having a certain amount of money spent on their protection.

The exact same logic applies on the level of state or society as a whole. It would be silly and demagogical to compare amounts spent on state defense to those spent on arts and sciences, because our riches of the intellect, without the ability to defend them, become riches that we ourselves are ready to hand over to some gangster or other, on a silver platter.

Debates in the media, or in more restricted circles, about the necessity of state defense have often been obscured by second-rate decorative phrases. Skillfull and emotional rhetoric can indeed confuse a citizen of the state and throw a veil of demogoguery over the basic question: Is Estonia a country worth defending? There can only be two answers—yes or no!

Those who maintain that state defense can wait until we are a great deal wealthier than we are today, those who question the need for state defense in connection with many (actually existing) deficiencies in state defense and who contrast state defense to other areas of life are, in fact, saying: Estonia is not worth defending. Sending the same message with their deeds are those who are evading military service, those who write contemptuously about the state's defense structures and defense leaders, and those who spread lack of confidence and contempt about the men defending our society.

In a democratic society, an individual has the right to his or her opinion and that includes, among other things, matters of state defense. Now, citizens of the Republic of Estonia also have the right, both in word and in deed, to express the opinion that Estonia is not worth defending. But the society as a whole, and each citizen of the state individually, also has the right to consider anyone holding such a view a traitor. There is no reason to be scared or shied away from using that right.

President Nixon, in his day, introduced the term "silent majority." He used it to refer to all patriotic, decent citizens who, in their loyalty to the state, went about their business daily, while an anti-establishment minority was making noise in the streets. But the majority, the decent citizens of the state, do not have to be the silent portion of the society. Estonia's constitution, and the laws based on it, do not prevent anyone from stating unequivocally, either verbally or in writing, that Estonia is a country worth defending, and that anyone thinking the opposite is not worth the respect of the Republic of Estonia.

Of course, no one can force anybody to put a door and a lock on one's home. If the majority of Estonia's society really feels that Estonia is not a country worth defending, then we can just wait and see when someone will again have the urge to occupy and colonize us. One month from now, the Republic of Estonia will be 75 years old. For 50

out of these years, Estonia was an occupied country because, at a decisive moment, we lacked the power and especially the decisiveness to defend ourselves. Or do the Estonian people really want to celebrate our 150th anniversary again behind heavy curtains, listening to Voice of America, and nervously puffing at a cigarette, hoping, God forbid, not to be found out! If so, then let's keep ridiculing our state defense, evading service in the military, and stay on the road of counting pennies and resorting to phrases of demagoguery.

Yet I believe (maybe as an idealist), that our society will straighten itself out, and find the dignity and the manliness to say that Estonia is a country worth defending. If that's the way it goes, then we will soon also have laws covering evasion of military service, for those who are systematically, both in word and in deed, undermining the defense capabilities of the state.

The Republic of Estonia will not forget those "naive country boys" who, without any pressure, came to serve at a time when people in leather trappings maligned them, when sensation-hungry knights-of-the-quill were busy penning pacifist treatises, and when irresponsible politicians were skimming a profit off the misery of old folks. These "country boys" are the future elite of our state, our permanent asset.

Neither, in all probability, will the Republic of Estonia forget those who, either in word or in deed, have declared that, in their opinion, Estonia is not worth defending. What conclusion could a state draw about such citizens, is still up to anyone's imagination. Today, it's true, we can still dismiss it with a haughty shrug, but some day Estonia, too, will become a real state. And it would be to our benefit to realize it today, especially those in their twenties, who can look forward to decades of living in this country.

[17 Feb 93 p 2]

[Text] Actually, it is useless to ask "if" Estonia is worth defending, because the answer is already given in the preceding article. In practice, the basic problems of state defense were solved by the "naive country boys" who entered military service under the propaganda fire coming from media leaders ignoring the defense forces. And, with bare hands, to boot, with only a rubber club for a weapon. Their contemporaries, in the meantime, could take it easy, exchange foreign currency, or enjoy the "sacred cow" status of students taking in post-secondary education.

Up until recently, Estonian media has relied mostly on negative undertones when covering the issues dealing with defense services. Accidents and mishaps were amplified tens of times. The article by Tõnis Jürine was the first to respectfully call the young soldiers the future elite of our state and our permanent asset meaning, undoubtedly, those decent young men whose service records are not marred by punitive action. It is also a credit to the homes, where these boys were brought up. The young men fixed up, without complaint, the barracks trashed by the foreign troops, and established order in regions that were all but given up for hopeless.

Returning to civilian life, however, these former members of the defense force are far from feeling like an elite. They are lucky to get a driver's job somewhere, but mostly they will have to start at a ridiculously low salary on a job with little or no prestige. The sad comparison with those returning from the War of Independence is inevitable. Maybe we should start an association for veterans returning from service which could, in the future, serve as a much needed defense reserve? Who would know better what the soldiers' problems are during their term of service and, after that, which of the officers are the real leaders, and who are who are in it for running a brisk trade with the food and boots meant for soldiers. Such an association would be a fraternity for young men, a helping, protecting and supporting unit to those striking out on their own or starting a family.

Estonia's soldier is brought up by the home, the school and the media, but he is formed by service in the defense forces. The determining factor for the first three is the right attitude. And what *this attitude* is will also determine the attitude of the defense forces as a whole.

We are facing a time of great changes and great responsibility. This should be kept in mind, especially by parents, but also by schools and all the teachers. When it comes to media, however, and individuals who have used, or are planning to use mass communications for anti-defense propaganda—we will have to remind ourselves that, in some cases, the word responsibility is paired with the word "criminal."

ARMS TRADE

Commentary on Decree Covering Arms Export Controls

93WP0082A Moscow KOMMERSANT-DAILY
in Russian 3 Feb 93 p 2

[Article by Vadim Bardin: "Government to Control Export of Special Equipment"]

[Text] The Chairman of the Council of Ministers Viktor Chernomyrdin has signed a government decree "On licensing procedures for the export and import of military products (works, services) on the territory of the Russian Federation." Thus "B" experts believe, a new basis has been created for state control of the most effective type of national export. Yesterday the decree began official distribution.

The competitiveness of nationally-produced weapons and accompanying goods is generally recognized. It is quite natural, therefore, that uncontrolled export of military products has been one of the consequences of the process of arms reduction in Russia taking place in parallel with the withdrawal of the former Soviet Army from the Soviet Republics and the creation of various autonomous military formations in these now independent states. But attempts to concentrate all Russian military export in special associations of the Ministry of Foreign Economic Ties are actively opposed by the converting defense industry.

The procedures approved by the government differ fundamentally from the usual export licensing: in order to obtain a license for military products, government consent to the corresponding export is required. Further processing of the license is transferred to the discretion of the Ministry of Foreign Economic Ties. There the requests for export are coordinated with the Committee on the Defense Sectors of Industry and with the Defense Ministry of Russia. Consent for the export of freed-up military property is also coordinated with the Goskomimushchestvo [State Property Committee]. Licenses for export (import) of military products are issued for each product type and general licenses for several types of products only in those cases when the government has allowed its recipient the export (import) of military products on the basis of intergovernmental agreements of Russia. There is also another condition: a general license is issued for goods which belong to a single product group.

A one-time license is issued for one deal and is in force for up to twelve months. A general license is for one year, without restriction in the number of deals. A time limit for consideration of a license request is also defined: 25 days from the moment that the documents reach the Ministry. It also has the right to annul licenses already granted, on the basis of a decision of the government or of the Interdepartmental Commission for Military-Technical Cooperation, which has the final say when disputes arise.

Overall, the "B" experts believe that the government decree, which officially does not limit the number of exporters of military goods, introduces clarity in the

licensing of export and provides a very effective mechanism for state control of this type of export activity.

Some types of licensed military products

- Telescopic and laser sights for mounting on weapons, periscopes, military optical and laser tubes, devices, instruments, parts and accessories for them. Code TN VED 901310000.
- Military navigational instruments and accessories to them. Code TN VED 901400000.
- Military powder. Code TN VED 360100000.
- Military explosives. Code TN VED 360200000.
- Military parachutes (including dirigible parachutes) and rotating parachutes, their parts and accessories. Code TN VED 880400000.
- Transmitting apparatus for radiotelephone and radio-telegraph apparatus, radio broadcasting and television, including or not including receiver apparatus; sound recording or reproduction apparatus, military television cameras, parts and accessories to them. Code TN VED 852500000.
- Protective equipment against military toxic materials, parts and accessories to them. Code TN VED 930800000.
- Military uniforms and accessories to them. Code TN VED 650800000.

Grounds for processing a license for the export (import) of military goods

- Decision of the government
- A duly processed request (coordinated with the Committee for Defense Sectors of Industry, the Ministry of Defense and if necessary with Goskomimushchestvo)
- A signed or initialed contract
- An original of the certificate of the user of the goods, issued by the authorized organ of the receiving country (only for the export of military goods)
- An original or official copy of the consent for execution of export/import deals involving special equipment by a foreign company, issued by the authorized organ of the base country of the company (only for the export of military goods)

The Ministry of Foreign Economic Ties has the right to elicit from the applicant any information necessary for issuance of the license (only for the export of military goods).

Continued US Trade Limits Despite COCOM Loosening Decried

93UM0386C Moscow KRASNAYA ZVEZDA in Russian
5 Feb 93 p 3

[Article by KRASNAYA ZVEZDA Correspondent Manki Ponomarev: "It Turns Out There's Life in the Old Dog Yet!.."]

[Text] At the end of last year, the Western press, with a great deal of pomp, announced that COCOM—the Coordinating Committee on Export Controls—which for many

years did not authorize the delivery of equipment and technologies to the USSR and its allies that were, in the view of committee members, "defense" related had removed the former discriminatory restrictions with regard to Russia and the other states that have been formed on the territory of the Soviet Union. Yes, actually, many of the most odious restrictions which, by the way, were not so much militarily significant as prevented the development of equitable international cooperation in the economic sphere, have been removed. Our country, and also other states that had been previously placed on COCOM's "Black List", acquired access rights to certain leading Western technologies.

It would seem that a rational approach had triumphed. But everything turned out to be not so simple. Western companies, writes the American newspaper THE NEW YORK TIMES, think that even today COCOM is continuing to conduct the Cold War. As a result, Russia and the other former Soviet republics are also not receiving those technologies that could turn out to be useful for the reform of their economies and that could promote overcoming its crisis state.

Industrial corporations of the most varied countries continue to encounter restrictions established by COCOM. American AT&T, British Cable and Wireless, and German Siemens are complaining about that. Their representatives, without conspiring amongst themselves, assert practically one and the same thing: the organization that was created in order to say "no" cannot force itself to say "yes".

THE NEW YORK TIMES writes that as before the import of certain types of computers that could help the Russians to conduct conversion of military enterprises is prohibited. They have not been authorized to become involved with the modernization of the obsolete telephone communications system in Russia. For example, COCOM rejected a project to lay fiber-optic communications lines in Russia's northern regions. The reason? The U.S. National Security Agency has expressed concern that these lines will permit the Russian military to avoid having their conversations intercepted.

Indeed, COCOM prevented SUN Microsystems from selling its personal computers to two Moscow auto plants because these computers, that are comparable in size to a chess box, have the power of a supercomputer that is being used, in particular, for the development of nuclear missiles. But even if the firm nevertheless sold its computers in Moscow, it would have to track the fulfillment of three dozen regulations, including placing them under guard around-the-clock and a ban on transporting the equipment to another location, albeit across the street, after installation.

Associates of COCOM Headquarters, which is located in Paris, assert that now they are not involved in monitoring the compliance of restrictive regulations. Maybe that is so. But there are no grounds not to believe the American press when it writes that, in the United States, the State Department is tracking compliance with these regulations and

that the Department of Trade, the Department of Defense, the National Security Agency, the Department of Energy, and the Arms Control and Disarmament Agency, and sometimes—the President's National Security Advisor—are participating in the review of orders.

Wishing to remain anonymous, a U.S. State Department employee said in an interview: "Many people think that COCOM is a Cold War 'dinosaur'. Maybe so or maybe not". Judging by everything, this diplomat was cunning. There's life in the old dog yet and it's obvious that the atmosphere continues to be poisoned not just based on inertia. It certainly appears to be advantageous to someone. But aren't there mistakes in the calculations here?

MILITARY CONFLICT, FOREIGN MILITARY AFFAIRS

Japan Slow To Back Military Confidence Building

93UM0450B Moscow NEZAVISIMAYA GAZETA
in Russian 3 Mar 93 p 4

[Article by Vadim Solovyev, military columnist: "The Land of the Rising Sun Is 'Late for the Train'"]

[Text] *This is the only state of the "Big Seven" that is aloof from military confidence-building measures with Russia.*

Russia-Japan

Both the manners of people's behavior in public and the particular features of the politics of each country in the world community have their own characteristic traits. For our Far Eastern neighbor—Japan—one of them, among a number of others, even according to Japanese observers themselves, is a steady tendency to "be late for the train," particularly in questions of transforming the military relations with other countries from confrontation to trust.

It is astonishing that Japan, being a leading member of the "Big Seven," which determines to a certain extent the economic and political climate on the planet, lags far behind the other six participants in establishing stable good-neighbor relations in military matters. It is as if Tokyo does not notice that the United States, Canada, and the leading states of Western Europe have unfolded a wide-scale dialogue with Russia and other countries of the former Warsaw Pact.

Maybe Russia and its generals react to Japan in a special way, after all the two countries crossed weapons three times in bloody wars in this century (1904-1905, 1918-1920, 1945)?

But it would be at least unfair to accuse the Russian military of creating such a situation. In recent years, the Ministry of Defense, first of the Soviet Union and then of Russia, has repeatedly made specific proposals for establishing military contacts. As in establishing military ties with the West, the Russian Federation Ministry of Defense sought to begin small: exchanging military delegations of the top echelon first, and then extending it to other groups of servicemen. The plan of contacts could include on a permanent basis, as is being proposed, many directions of

military activities: mutual courtesy visits by ships, which has always interested the civilian population, and also air shows by military pilots and exchanging groups of military specialists. More in-depth proposals for creating military ties have also been sent to Tokyo, such as exchanging instructors at schools and academies, short trips to acquaint groups of military cadets with one another's daily life, duty, and training. The Russian military are willing to conduct small joint military exercises at the subunit level in order to know each other better and to create a spirit of trust even at the rank-and-file and junior officer level.

For the time being, practical measures of mutual security in operations of the two country's navies, which the Russian General Staff views as observing the status of the "high seas," have been ignored. Such agreements to prevent dangerous incidents at sea have already been implemented in relations between Russian military seamen and their counterparts from the United States, Canada, Italy, and a number of other countries. Specially developed code tables are used so warships know each other's intentions when they meet, thereby reducing the risk of conflict situations. The agreements also call for mutual assistance in the event of trouble or accidents, and many other things that make the sea truly safe. Within the framework of the "high seas" agreements, periodic meetings of the naval command representatives of the sides, where they summarize the results of work, and elaborate and make more precise new conditions of cooperation. But all this "does not work" in relations with Japan.

Japan also remains aloof from the "open skies." And many countries are actively cooperating in this area. Beginning in 1995, these countries' military will observe one another's activities by making flights over military installations. Not too long ago this would have been called "blatant espionage," but now it takes on civilized forms of trust. But a situation arises, for example, in which American specialists will be able to observe all military installations on the territory of Russia, but Russian specialists by no means will be able to observe all American installations located in direct proximity to Russia's borders, including on the territory of Japan. But the Russian Ministry of Defense believes that there is still enough time before the start of inspection flights to clear up all the details, and we would hope that they will be fully equitable.

But what about Japan? Its military would not be averse to conducting a dialogue with their Russian colleagues. Occasional meetings take place. Last year Andrey Kokoshin, first deputy minister of defense, visited Japan. A group of Russian generals headed by the first deputy chief of the General Staff, Andrey Nikolayev, returned from Tokyo at the end of last week. At the invitation of the Japan Defense Agency, the group gave lectures on Russia's defense policy firsthand, as they say, and again expressed the desire to develop military ties.

But a paradoxical situation has taken shape: Japan's Ministry of Foreign Affairs is impeding those peacemaking processes which it has a duty to inspire in military circles. The territorial issue is placed at the head of the list, and distrust is being stirred up, including distrust of military

ties. For example, why exaggerate the fact that machinegun and artillery units of Russian troops are located on the Kuril Islands. Although there is a political decision to withdraw them to the mainland and the Russian military command authorities have announced how this will be done over two years with a slight increase in border guards on the Kuril Islands, this topic still overshadows the discussion of all other aspects of Japanese-Russian military relations. Other arguments are also put forth by the Japanese side.

For the time being, the military's package of intentions remains unclaimed, and they hope that a breakthrough will still be made. They believe that it will most likely be during President Yeltsin's upcoming visit to Japan.

Non-Soviet Former Warsaw Pact Members' Defense Status

*93UM0450A Moscow KRSNAYA ZVEZDA in Russian
11 Mar 93 p 3*

[Article by Yuriy Kostin and Dmitriy Shepelov: "The Former Warsaw Pact Allies"]

[Text] The breakup of the Warsaw Pact and the splitting up of the former USSR into numerous new states radically changed the geopolitical situation in the Old World. The newly emerged democracies of Eastern Europe are faced with the need to defend independently their right to national independence, territorial integrity, and to choose their path of development.

In reforming their national armed forces, the countries of Eastern Europe are putting at the head of the list questions of improving their qualitative characteristics and using world (mainly western) experiences of military organizational development. There is much that is similar in these countries' approaches to the problem of strengthening their defense capability (influenced by the old school within the framework of the Warsaw Pact). At the same time, there are also significant differences.

Poland

The country's new military doctrine was adopted on 4 November 1992. It notes that the Polish Armed Forces must possess sufficient might to "resolve in its favor" any local conflict into which Poland might be drawn. With respect to waging large-scale wars, it emphasizes that the task of the Polish Armed Forces comes down to "resisting an aggressor as long as possible, inflicting maximum losses on him, demonstrating their resolve to stand to a victorious end, and gaining the time necessary for other states and international organizations to react."

The military reform being conducted has affected primarily the Ministry of National Defense. The decision has been made to separate the functions of administrative and operational control of the armed forces. Henceforth, a civilian will head the Ministry of Defense. Operational control will be concentrated in the hands of the chief of the General Staff.

In accordance with the new strategic concept, the forces are being redistributed taking into consideration possible

operations on any axis. The eastern axis is considered priority: a fourth military district is being formed—the Krakow District. Additional troop contingents are being transferred to Poland's eastern borders; troop strength in this region will soon reach 40 percent of the total numerical strength of the Polish Armed Forces.

Poland plans to switch to a corps-brigade organizational structure (following the example of a number of NATO countries). National rapid-deployment forces are being organized, which will be made up of the most combat-ready formations and units. The Regional Defense Troops will become a fundamentally new component of the armed forces.

Taking into account the serious financial difficulties which the country is experiencing, the command authorities of the Polish Armed Forces plan to operate the Soviet-made military equipment in the inventory for at least 10 years, purchasing spare parts for it and renovating it through deliveries from the FRG.

Hungary

Hungary's new national security concept tasks the armed forces to "deter an aggressor from any direction for the period necessary to settle the conflict by political and diplomatic means." Based on this, the disposition of troops should meet the requirements for their rapid transfer and deployment to any axis to organize a defense "along all azimuths."

During the course of reorganizing the country's armed forces, a number of new commands were created: the Ground Forces Command has been organized based on the headquarters of the Fifth Army, and the headquarters of the former I Air Defense Corps has been converted into the Air Defense Forces Command. It should be noted that Hungary is devoting special attention to questions of organizing air defense. In particular, Hungary, Poland, and the Czech Republic (and possibly Slovakia) in the near future, with the assistance of specialists from the West, plan to create a joint airspace control system, which subsequently could interact with a similar NATO system.

In addition to the above-mentioned innovations, three mechanized corps have been eliminated; their headquarters have been reorganized into command and control elements of three military districts. Organization of a new,

fourth military district has been completed. At the end of last year, the command authorities of the Hungarian Army began creating territorial defense troops. It is planned to maintain the numerical strength of the ground forces at the present level to 1995.

Romania

The strategic goal of Romania's military doctrine is "defending the country against any aggression" in accordance with the principles of a "nationwide defensive war." In this regard, by 1996 they plan to complete reorganizing the army and equipping it with the most modern weapons and military equipment. In particular, it is plans form three army corps on the basis of four army zones of responsibility and to combine them into three military districts, respectively: Northwestern, Southern, and Eastern.

It is planned to have separate divisions with rapid deployment functions as a part of each of the districts. The basic task of these formations is, if necessary, to move up to a designated area of the state border and support the operational deployment of the main body in cooperation with the border guard.

It should be emphasized that Romania has the largest ground forces among the countries of Eastern Europe—167,000, and has no plans to reduce them in the near future.

Bulgaria

The military technical aspect of Bulgaria's new military doctrine is based on reasonable defense sufficiency. In accordance with "the concept of reorganizing the armed forces for the period up to the year 2000," the first significant practical steps have already been taken. A civilian Ministry of Defense has been created. It is planned to convert the troops to a brigade structure. Personnel strength of command and control elements is being reduced by 80 percent.

Based on the existing three combined-arms armies, it is planned to organize three army corps, and a fourth through a reasonable redistribution of forces and assets. The numerical strength of the ground forces will be reduced slightly by the mid-1990's from 77,000 to 66,000. Equipping the armed forces with weapons and military equipment is oriented both towards western and Soviet (Russian) products.

Effective Combat and Numerical Strength of Armed Forces of the Countries of Eastern Europe (first number given is existing level; second number is quota under the Treaty of Conventional Armed Forces in Europe)

Country	Personnel	Battle Tanks	Armored Combat Vehicles	Artillery	Combat Helicopters	Combat Aircraft
Bulgaria	97,000/104,000	2100/1475	2053/2000	2129/1750	44/67	259/235
Hungary	80,800/100,000	1357/835	1809/1700	1040/810	39/108	134/180
Poland	251,400 [figure illegible]/234,000	2650/1730	2253/2150	2316/1610	31/130	509/460
Romania	187,000/230,248	2875/1375	3206/2100	4009/1475	220/120	486/430
Czech Republic and Slovakia	145,000/140,000	3208/1435	4236/2050	3414/1150	56/75	402/345

Czech Republic and Slovakia

Two independent states—the Czech Republic and Slovakia—have been existing as neighbors on the territory of former Czechoslovakia since 1 January 1993. Presently, the question of dividing up not only federal property but also the federal armed forces is being decided. The numerical strength of the armed forces is 145,000. The Czechoslovak Army has in its inventory: 3208 battle tanks; 3414 field artillery pieces, RS30's, and mortars; 402 combat aircraft; and 56 attack helicopters. It is known that a preliminary agreement has been reached between the leadership of both republics on dividing up this property (taking into account the quotas specified by the Treaty on Conventional Armed Forces in Europe) in a ratio of approximately 2:1.

SECURITY SERVICES

General Bondar Interviewed on Ukrainian Border Guard Unit's Mission

93UM0337B Kiev NARODNA ARMIYA in Ukrainian
1 Dec 92 p 3

[Interview with Major General Volodymyr Bondar, chief, Southern Administration, Ukrainian Border Troops, by Guards Lieutenant Ihor Krol, NGU press-service officer and NARODNA ARMIYA special correspondent; place and date not given: "Where There's a Threat to the State, the Guard Will Be There"]

[Text] Independent Ukraine has a state border which, hopefully, has been and is being protected from any attempts to infringe upon its inviolability. That is the conclusion to be derived from the interview granted to our special correspondent by Major General Volodymyr Bondar, chief of the Southern Administration, Ukrainian Border Troops.

[Krol] Major General, Sir, for several months the Border Troops and the Ukrainian National Guard performed joint service along our border with the Republic of Moldova. Would you kindly tell us about this in some greater detail.

[Bondar] Indeed, the actions taking place in this neighboring country did evoke serious alarm among the people of Ukraine. That's not surprising inasmuch as a civil war was going on close to our border; people were being killed; cities and villages were being burned. In connection with the aggravated situation in those regions of the Republic of Moldova bordering on Ukraine—a situation which endangered the lives and health of Ukrainian citizens, our president on 17 March signed an Edict entitled "On Preparations To Protect and Defend Ukraine's State Border With the Republic of Moldova."

In order to carry out the Ukrainian Presidential Edict and the governmental decisions, the Border Troops—along with the National Guard and personnel from the Ministry of Internal Affairs—closed down the most important Ukrainian-Moldovan border crossings as early as 20 March. The principal mission assigned to our troops was to ensure the territorial integrity and inviolability of our border, as well as to protect and defend the population

living in those regions which border on Moldova, not to allow the use of our territory by the forces of the opposing sides in the civil war, and to put a stop to any border violations whatsoever.

The Border Troops—working in tandem with troops of the National Guard and staff personnel of the Ministry of Internal Affairs—confiscated more than 700 firearms, a large quantity of ammunition, contraband items, including strategic raw materials, hundreds of pieces of non-firearm and gas-type weapons, and a great number of grenades.... Moreover, they detained many armed criminal groups and other malefactors, who were terrorizing the local inhabitants.

And so, in summing up the facts cited above, we can make the following assertion: All the Ukrainian troops who guarded the border with Moldova ably carried out—and are continuing to carry out—the Presidential Edict, and are thereby making a contribution to the difficult task of ensuring the sovereignty of our state. And this contribution encompasses not only confiscating weapons or detaining border violators, but also—first and foremost—safeguarding the lives of Ukrainian citizens and preventing their blood being shed.

[Krol] How did the members of the National Guard keep up with the Border Troops in accomplishing this mission?

[Bondar] The actions performed by the NGU [Ukrainian National Guard] units in the 50-kilometer zone where martial law was declared merit high marks; only positive things can be said about these troops. It is certainly the case that, in performing the tasks assigned by the Ukrainian Law entitled "On the Ukrainian National Guard," each guardsman is honorably and ably carrying out his constitutional duty and obligation, as well as precise organization and self-awareness. There are many examples attesting to the fact that Ukrainian guardsmen have innately high moral and military qualities. Even in extreme situations these troops always acted with courage and determination. It is not by chance that a person whose heroic sacrifice will never be forgotten by Ukraine was serving in the ranks of the National Guard. Volodymyr Ihnatyev, a brave officer and a major in the Guard, covered an exploding bandit grenade with his own body and thereby saved dozens of passengers in a railroad car on the train from Odessa to Yasnuvat. Guardsmen should be proud that the first soldier to be awarded independent Ukraine's recently approved highest military award—the "Presidential Medal of Honor"—to be sure, and with great regret—posthumously—was one of their own comrades-in-arms.

The period of service in the zone where military law was declared has shown how targeted and effective the addition of the Odessa Regional NGU Military Operational Group was for protecting and defending the border as well as the population living in the border regions.

The Border Troops and the Guardsmen—so to speak—supplemented each other. For example, whereas the Border Troops employed their forces to protect and defend the border directly, the Guardsmen set up defensive posts

to protect the most important facilities and communications; they carried out patrols in the population centers; they also detained and neutralized isolated border violators as well as armed bandit groups which were endeavoring to penetrate into Ukrainian territory....

The Guardsmen accomplished all their assignments very well. And at the level of their military and special training the Guardsmen are certainly continuing to perform their essential tasks; they are perfecting the process of regulating the special state of affairs with regard to these matters. Moreover, the tactics and high degree of combat readiness, as well as the mobility of the NGU forces, the status of their arms and military equipment, their practical habits as soldiers, and the experience which they have acquired in performing complicated, difficult, and responsible service missions all attest to the following conclusion: Guardsmen are fully up to coping with the entire complex of functions and direct missions designated by the Law entitled "On the Ukrainian National Guard."

[Krol] Based on everything you have said above, what—in your opinion—are the possible future prospects and trends for subsequent participation by the National Guard in carrying out missions and tasks assigned by the state?

[Bondar] First of all, I hope and expect that in the future the Border Troops will continue their joint work in tandem with the National Guard. As the situation along the border with Moldova has shown, the Border Troops in the matter of protecting and defending the security of the state border and maintaining order in the border regions require the

help of such an armed formation as the National Guard. At least that's the way it was then, and as it still is now. And this is extremely necessary for us as Border Troops. The practical experience of employing joint forces and personnel played its own decisive and very positive role. In the future we must stand shoulder-to-shoulder in guarding the interests of our state, and we must assist each other in carrying out our constitutional obligations. The people can only speak words of gratitude for our capable service and faultless military work. The Guardsmen can be entirely trusted. Hopefully, they will continue to be our partners. I am convinced that they will always march along in the ranks with us as brothers-in-arms.

Secondly, a complicated, crime-engendering situation has now evolved on the streets of our large cities. It requires decisive and active endeavors to stabilize the crime rate. I think that the National Guard is just such a force—one which is capable of assuming at least some of the responsibility for protecting a democratic society, constitutional rights, as well as the honor and dignity of Ukraine's citizens. By the way, the leading officials of the municipal organs of power, people's deputies, and the law-enforcement people also agree with this point of view.

The National Guard has all the possibilities for becoming an effective and highly mobile military reserve for the president of Ukraine. It could become a hopeful guarantor not only of the independence of this sovereign state, but also for maintaining and upholding the laws and legal norms on its territory.

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